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ABSTRACT

This is the third collection of year-end reports selected by the Institute for Services to Education (ISE) from the reports prepared by the teachers and counselors of the Thirteen-College Curriculum Program (TCCP). The present document, covering the year 1969-70, comprises a selection of entire reports. The reports are addressed simultaneously to 3 audiences: faculty, governmental agencies, and counselors. Some of the chapter reports include subjects on mathematical self-tests, computers, humanities, philosophy, social institutions, biology, and counseling. The teachers who author these reports discuss the value of the TCCP and what is going on in their classrooms. (Author/PG)

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TEACHERS AS INNOVATORS

A SELECTION OF REPORTS
BY THE TEACHERS AND COUNSELORS
OF THE THIRTEEN-COLLEGE CURRICULUM PROGRAM

1969-70

(Five-College Consortium Edition)

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March 1971
Institute for Services to Education
2001 'S' Street, N.W.
Washington, D.C. 20009

PREFACE

Joseph Turner
Evaluation
Institute for Services to Education

This is the third collection of year-end reports selected by ISE from the reports prepared by the teachers and counselors of the Thirteen-College Curriculum Program.

The first collection, "Guide for Teachers," covering the academic year 1967-68, consisted of a selection of excerpts from the reports, brought together as supporting illustrations for a narrative about the program prepared by ISE.

The second collection, "The Teacher's Perspective," covering the year 1968-69, consisted of a selection of excerpts from the reports, arranged by course of instruction and by certain key themes that emerged from the reports themselves.

The present document, "Teachers as Innovators," covering the year 1969-70, comprises not a selection of excerpts but a selection of (for the most part) entire reports. Also included are reports by counselors and a report by an outside visitor, a consultant to ISE.

It is one thing to dream up exciting ideas and write beautiful curriculum units, another to determine what is actually happening in classrooms. The purpose of these collections of reports is to document what the teachers and counselors are trying out and what the results are. The teachers describe what is going on in their classrooms and discuss the value of the Thirteen-College Curriculum Program generally.

The selections of reports are addressed simultaneously to three audiences.

First, the collections are addressed to the teachers, counselors, and project directors in the program itself and to the staff of the Institute for Services to Education.

Second, the collections are addressed to any member of a faculty--teacher, president, dean, departmental chairman--in one of the program colleges, or any other college, interested in educational experimentation.

Third, the collections are addressed to the governmental agencies and private foundations that support the program.

Let me conclude with the necessary apologies and acknowledgments. The writing of a report by a teacher is a personal matter, but so also is the selection of a few reports by an editor from a much larger pile. I apologize if I have shown poor judgment in making choices. If there are any complaints, please let me have them. I also apologize for any typos in this document. I thank Elias Blake, Jr. and John T. Parmeter for giving me the benefit of their views when necessary.

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SOME WHATS, HOWS AND WHYS

Orrin Hall
Ideas and Their Expression
Talladega College

[This material has been excerpted from a longer report. Editor]

What have I done? and what have we done? and why do it that way? The answers to these questions compose the content and the organizational pattern of this report. Also included are specific "lessons" or "assignments" with commentary relevant to that three-sided question what-how-and why do it that way? (Blame it on the fire in November which totaled out my office, my records, and course papers. That is why my first semester's stuff is thin compared to its fat friend of the second semester.)

Rapport - and the theme Self and Alienation

Since it was late August when agreements were made and I signed into the TCCP program at Talladega College, I missed the summer conference. Miss Bonnie Barnes, who didn't miss it, helped some in catching me up and on to the action. She had there selected and ordered books appropriate to the theme "Self and Alienation". We launched with that theme, but why spend nearly four weeks on the topic Rapport? I was after student participation and involvement, and I went after it in a most elementary way; games and improvisations.

Games and improvisations for the purpose of rapport - I found to be very effective: they released some student's inhibitions, freeing them to take a less nervous part in what we were and will be into; they created novel situations and activities, placing and posturing us in odd and new predicaments which forced the body and mind to act and think differently; they were usually fun, easy to do, all can get with it, and I recall only eight students who called our extraordinary program beginnings "childish" or "unsophisticated" for their college freshman year.

Since I refused the students the security of their seats, our room became a dance-studio in appearance, and each day something of a surprise occurred in the arrangement of the chairs and the class members. A LOOK AT ME was one of the games which immediately invited students to stand, first in groups, then individually, to be "looked at," with this was a choral and chant responses: "Hey, take a look at me." (response-We're looking at you.) "Hey, take another look at me," (response-We're taking another look at you.) "Thank you." (response-Welcome.)

Of course, music and songs such as "Hey Look Me Over" can assist. And, of course, the choral and chant can be varied, as well as, the positioning of the students. However, the intent is constant: a free and easy starting situation which helpfully and humorously sets the student to accustom himself to a new teacher, new group, and novel approach to the old problem of learning why and how to express yourselffand ideas.

What "others" did we do? Frequent "warm-ups" were almost daily: rhythmical clapping or body movements which caused us to touch one another, would make up the class to the presence of themselves and one another. (Conversations were as immediate as the laughter.) SYMBOLIC STATUES was one of several

IMPROVISATIONS. Instructed to team up then later going it alone, the student would freeze into some symbolic pose which was to be guessed at, interpreted, and discussed concerning its relevance to our alienation-theme. Another improvisation game is called "FROM THE DECK," the deck being just 3x5 cards- and on each is a role to be improvised as he plays it out alone or with selected help, e.g. a young woman who wants to be alienated, an old man forced into an alienation camp; a teacher who is alienating students; a student who is alienating a teacher. To start discussions or initiate writing assignments, these are effective for a while, then the novelty wears because you can get too much of a good thing by over-exposure.

From our 1969-70 units on LOVE (?) and, I believe, units on SELF AND ALIENATION, I utilized "Circles" and other improvisational techniques. These units stimulated me to create similar techniques which the class took to actively- and *yes*, many and varied conversations concerning *self-confidence* or *self-control* or *self-separation* or *self-love* and hate, were evoked. Such conversations occasionally dove to depths of self-revelation, perhaps to self-discovery or awareness of one's individualty--for better or worse. I recommend games and improvisations as a means of getting rapport, of course, the teacher must be in and with it all the way. It is not a *you-do-it* exercise or drill; the teacher must be also a student when a volunteer student sets up an event and has a chance to direct it and you.

Yes, a writing assignment was integrated with the "games," a simple two paragraph form whose content would answer the assigned topical-question: RAPPORT - HOW DO YOU GET IT? HOW DO YOU LOSE IT? The tough trip into expository writing began with this assignment designed to explore the *whys* of paragraph form and content - *why* should writing be interesting? *Why* should paragraphs have central thoughts? *Why* must you illustrate and explain what you say? *Why* must sentence one have continuity or congruity with sentences two, three, etc.? *Why* should it be this way?

DEDUCTIVE THINKING was encouraged and required as the students observed several of their classmates' compositions (mimeographed) to reason out answers to, or shape opinions about, the *why* questions. Discussing and observing the *whys* of paragraph form and content, inevitably got to the *how* you do it? English handbooks and pointing-it-out in the writings of Kafka, Camus, Jones, and others initiated answers; and assignments which sensitized the student to *what* he said and *how* he said it were frequent. For example, a mimeographed top-sheet required the writer, the student, to analyze his second paragraph (this assignment had several paragraphs). Such questions as *how* does it relate to the theme or purpose of the composition? *How* does it relate to paragraph one? Any questionable slang or "inappropriate" diction - *why*? *any* catchy or novel word usage or figurative language which slaps the reader's mind to attention-why? Of course you can lengthen the list, e.g. *how* much sentence variety is evident when compared to paragraphs one and three? Or shorten it to concentrate on one aspect of style, e.g. *why* did *you* use that particular sentence structure to express yourself? Since the semester's theme was SELF and ALIENATION, I focussed the student's out-and insight on just what their writing revealed about their mood and attitudes. as well as, their skills and smarts toward the ideas expressed.

The self-analysis technique gave the class a good sweat and a new strain because it's all work with some play, if the topics are imaginative or, at times, of their own concern and choosing. And, if our rapport efforts had any virtues, an attitude of constructive criticism should prevail since we accepted and privately pledged rapport, emphatic understanding of one another's trials and errors. But, no miracles, only a few good signs in several students when they discovered how to ruin rapport by not giving or taking criticism decently. Actually, the rapport-effort seem to release the students' "negative" feelings and they enjoyed rapping about what they didn't like about me, the course, the school, the . . .

Too Much Alienation

Our limping movements to be "positive" with and for each other and our sprained methods to practice evidence of our alienation in the actual human situation of our times and class room. The prevalence of our theme was upstaged again by pop-records and folk songs which students used as "interest devices" in their informal speeches or discussions with the class. AGAIN, AGAIN, AND AGAIN was it emphasized: the desirability and necessity of "interest devices" (popular examples and illustrations, allusions to plays or politics, rhetorical questions, figures of speech) for effective COMMUNICATION OF IDEAS in speaking and writing. How you say it or write it was always a target for our criticism of one another's communications, and, of course, when we read Kafka's "Metamorphosis" or Camus' Stranger, we also searched for the how and why of ideas expressed in a short story or novel. This was done by a close focus on symbols, or a dramatic scene, or monologues, etc., to see just what the author was employing as a means of expressing his ideas.

IT WAS ONE OF THE PRIMARY CONCERNS OF THE COURSE THAT THE STUDENTS BE EXPOSED TO AND EXPLAINED ABOUT THE WAYS AND MEANS THAT WRITERS AND SPEAKERS USE TO EXPRESS THEIR IDEAS. AND ONCE KNOWING THIS, APPLY THE SAME TO THEIR SKILLS AND STYLE.

Yes, the class tired of too much ALIENATION as a theme, but before our planned switch, we had experienced the personal appearance of fictional characters (students volunteered to act out a version of a chosen character who would answer class questions about why they did what they did or didn't do, and how the author is using them), a mock trial scene (from The Stranger, emphasizing the power and use of implication and suggestion, plus understatement) and several skits or role playing which presented to us extemporaneous counterparts of the situations revealed in the reading of Kafka's short stories or Thurber's "Secret Life of Walter Mitty."

A Switch to Solution and Responsibility

"Is there a cure for this alienation situation?" In quest for a solution we invited three guest speakers from the college and disciplines of Religion, Philosophy, Art. Each speaker was later evaluated as to what he said and how he expressed his ideas. Then we, again, grouped up in fours or fives and each group presented its cause and solution (if any) to the alienation situation. If you were there you would have noted that pantomime, illustrated talks, skits, debates were just part of the variety in form of idea expression. Their purpose was not only to interest the class but also the content of the reports was to stimulate thought and to evoke discussion. I observed that the majority of the class did not think their solution through, but they were anxious to perform, and were creative. THINKING THINGS THROUGH was the intention of several assignments to come.

The two objectives: 1) to have the students cooperate in their preparation of material which means taking responsibility for their own behavior in class; 2) to organize what they say and how they say it so that the class gets their message and meaning, were in part realized. Also realized was the fact that many students got uneasy and even frustrated when given the freedom to search around for answers to an apparent problem -- alienation, which they themselves called "relevant" to the current scene. And, here too in this assignment, I would note individual students speech problems, and in an office conference attempt to help him recognize it and change it.

The Love Theme

By vote the class selected LOVE as their theme for spring semester. I have included below the first assignment sheet used in the process and progress of that course. It served as a transition assignment from SELF AND ALIENATION. Why use this type of assignment? For the purpose of variety and to pick up on class interest and ideas heard during our planning sessions. Of course, there are other purposes too. Here is the sheet.

Sample Assignment Sheet

Contribute to next Wednesday's and Thursday's discussion and class action choosing one grouping or unit of response, and to the limit of your interest get involved.
(just for notes. . . kind of sentence - compound; mood - declarative; some inversion of word order in second main clause)

Item 1.

a. What do book reviewers or critics have to say about LeRoi Jones as a writer . . a person and Tales.
b. What are your reviews and comments about his stories--his ideas--his style?

Item 2.

A homosexual character and love scene comprise the situation in "Alternative". The faggot gets the comic contempt treatment by the students.
a. Is this a typical or an exaggerated attitude toward homosexuals?
b. What about this situation? Should the faggot have his sexual freedom without social criticism or should he be considered "sick", be professionally treated, or should he be penalized by law, or . . .?
(possible debate situation here)

Item 3.

LeRoi Jones has a poetic sense to his idion: many images, play on words, etc. Choose about a page length passage which is not immediately comprehensible, somewhat abstract or obscure, and paraphrase it. See what happens as you express his ideas in your style of expression.

Item 4.

The affairs of husbands and wives are exposed in "Going Down Slow." Is divorce the solution to this affair situation among married couples or is it sophisticated or sad acceptance that affairs are just one of those things, or is it a personality problem ________________ or ____________. What do you think about it?

Item 5.

Choose another personal or social crisis or issue which explodes in the stories and present it to us telling why you or we need be concerned?

Item 6.

Are there any "laughs" in the stories, any irony or sarcasm, comic situations. . . If so, humor us with them in your way of expressing them to the class.

Item 7.

What "picture" would you compose for the book's jacket? (draw it, and tell us why you picture it that way.)

Item 8.

"Answers in Progress" offers a fantasy; the Blacks take over the world, seemingly with the help from creatures of another planet. Compose a poem or short story of your own with a similar theme or idea: "A Black Takeover," "A White Takeover," "A Woman Takeover," "A Nobody Takeover," "A Rat Takeover". . . Create pure fantasy or mix it with a message whatever you choose.

Here are some comments on the assignment sheet point by point

First, a comment is offered on the note in parenthesis directly after the first sentence.

Frequent use, for drill or review purposes, was made of brief spot interjections of this type. The class and I agreed to pick up on the vocabulary of GRAMMAR and discuss concepts relevant to the expression of ideas. The assignment sheet itself became GRAMMAR lesson material as we reviewed it briefly for "errors," intentional or unintentionally made, and not only for errors but examples of variety in sentence structure, punctuation usage, diction,style etc. were exposed and explained.

Item 1 concerning book reviewers got us into discussing the questions: How do book reviewers review? What do critics do and why and how?

Item 2 shaped into an informal debate and the students were provoked by me to THINK IT THROUGH and support their views by reference to "authoratative" outside reading. This theme of homosexuality also reappeared in our discussion and character analysis of Banford and March in The Fox.

Concerning Items 3 and 4--style was re-emphasized as we hacked through Jones' experimental expressions. This book confused and frustrated many in the class, for only three or four of the tales came relatively easy to their understanding. Yet, the book has excellent source material for examples of creativity and cruelity with and to our language. And, the book served as a preparation for our poetry unit, since Jones has a poetic sense in his idiom, and poems are in the text. Also, figurative language and syntax were noted and explained again.

Items 5 and 6 again allowed students more class practice in oral expression of their ideas. Again, the emphasis was on clarity in expression as they reasoned out their propositions.

Item 7 gave a creative chance to students who could draw or paint to show and tell about their picture compositions.

Item 8 was not the first time students had chance to create a poem or story. However, many did react and composed. Here, with this group of fantasy, we reviewed and discussed the use of fantasy, and satire as a means for social protest and creating a climate for change of attitudes and laws.

Again, this assignment allowed chance to pick and choose, and students could also work alone or in groups to present their contributions to the class. Did all this option and variety in assignment produce an alert and active class? Yes - on some days, and on others you could have filled twelve coffins. It did, however, alert and activate the teacher because it's much-too a point of being too much organizational and guidance work when the action is several things going at once. YET IF YOU'RE AFTER STUDENT PARTICIPATION AND INVOLVEMENT, on a level higher than the common question and answer technique, what other choice is there? Planning also involved students, and I think they liked this aspect of the course in theory only - therefore I sought to stimulate ideas as we planned and to phase into LOVE, as revealed in myths and biblical poetry and short story.

What About the "Good" but Bored Students?

They are really no problem if their boredom is not premeditated. However the several bored ones (good and otherwise) were offered special assignments, e.g. note the invitation to dig into African myths and, of course, culture to surface some "wisdom" about their love thoughts. This assignment was also offered to satisfy the students' rightful hope and need to dig Black Studies (June Jordan's book, as well as Le Roi Jones, Baldwin, Sackler's play and others were available and used). However few of the bored and unbored responded to this one or any one of the "specials" offered to motivate and develop their communication skills.

What's learned from myths, besides a VOCABULARY INCREASE? (cupidity, psyche, Oedipus complex, Narcissus complex, eros, agape, nymphomaniac, and . . .). "Man and Myself as a Myth Maker" was a source of active discussion, for we forced our way into the ideas and images of man as a romantic and tragic lover, wondering about the nature of true love, erotic-love, self-love, sentimental love. Besides expanding the vocabulary and perspective of ideas, the myths were appreciated as good stories, and they stimulated the students to compare their own myths which were read in class for the practice of ORAL INTERPRETATION. Reading aloud in class did help several students to gain variety in tone and pace in speaking. Reading aloud was combined with role playing and the student, if he chose, could read from the point of view of one of the characters in the reading, making whatever changes necessary to maintain congruity.

A sensuous surprise, perhaps a shock, was realized by at least four students when we tasted the erotic flavor of Solomon's Song. The elemental and vivid imagery was contrasted with the "pictures" of Love offered the reader in Ruth's story. Some attention was given to a comparison and contrast of the short stories by Kafka and Book of Ruth, not for the ideas involved, but for the techniques of telling a story and for a discussion as to the effects of telling it that way.

Provoking the Student to Create

Again, as we got into poetic thinking and expression of ideas, the student was invited to know and create something--in this instance an epigram and a limerick. I used both as an elementary technique to introduce the sound and sense of poetry, hoping to have the student get the beat, the pulse of poetry. They got it and used it in their own creations. Yes, we did use and review the jargon of poetry (i.e. iambic pentameter, alliteration, assonance, free verse, lyric and sonnet, simile and metaphor) but, moreso, our concern was to the questions: why say it in a poetic form - why not in prose? and what does poetry do with and for the Language?

The poems we read aloud and discussed were those contributed by class members, for they were asked to bring in favorite love poems. Since they have a conservative, traditionally formal, idea of poetry, poems from English Literature (15th-19th century) were popular. What's the poet saying - how does he do it - and what is its effect? The answers became our subject matter, and, of course, the power of a word as an image or symbol was explored and explained. However, it was not word study - but sentence structure and syntax on which we spent our time, especially with e.e. cummings poems (from the '67 unit on Love). The students were baffled, but some caught on to what he was up to and why. With e.e. cummings (and Le Roi Jones too) we had a chance to evaluate his extraordinary grammar, and the effectiveness of his style. We played around with words and sentences and saw something significant about Syntax and Style, e.g. I asked for sentence inversions, making the subject the last word, the verb the last word, changing verbs to nouns and nouns to verbs, creating brief parallel thoughts, etc.

The Fox and The Heart is a Lonely Hunter name the two novels read for the purpose of comparing form and content and, again, to discuss what was said and how and why was it said. Quickly reviewing the mimeo sheets 4 and 5 will reveal the assignments which,for some reason, stimulated an outbreak of dramatic presentations to the class: at least 4 groups created their versions or new endings to The Fox. Time refused us its presence so we but touched on McCuller's masterpiece.

The comments on the enclosed sheets will help direct your thinking as to the how and why of their use.

How Did it Turn Out

The students were slow to click and work together among themselves and with me, to my satisfaction. Yes, they did make an attempt which usually produced good to excellent class hours of learning and action. But they need more practice and educational conditioning to get involved. Many of the students seemed to prefer a didactic and autnoratative approach to the subject matter, and the basic questions of why and how of idea expressions - they allow to escape or lose out by default. I don't believe this to be a local or regional condition; from my experience it's national.

Yes, the students are now more linguistically sophisticated, and they are much aware of what it takes to express their ideas clearly. It's encouraging to note that 42% of the class received grades of B or better, and the grades were not gifts. Ask several disappointed students about that because 23% of the class graded out below average, but not failing. For reasons known and unknown they just missed the C grade level which included 35% of the class.

A word of Thanks to those who contributed to the units on LOVE and SELF AND ALIENATION! Your thinking provoked mine and the class. "Thank you."

A MATHEMATICAL ENVIRONMENT

Roger Ingraham
Quantitative Thinking
Bennett College

It is five minutes to eleven in the morning, and students are walking to and from classes. One young lady, Jacki, has just left her dormitory and is headed for math class in the Science Building. She walks down the corridor past the lonely water fountain and wastebasket into room 102. The walls are bare except for several black boards. One of the boards (which are actually green) has graph lines already painted on it indicating that mathematics could be taught here. Jacki takes her seat in one of the multitude of desks which are neatly arranged in rows and columns. Her desk is small, and there's not much room for her spiral-bound notebook to fit on it. Other students come in and take their seats and open their notebooks for the day's note taking. There is some conversation as someone asks, "Where's Brenda?" "Oh, I'm taking notes for her." Other comments can be heard, like, "What did he do last time?" "Did you get that problem?" "How did you like the Nina Simone concert?" Then the class quiets down as the instructor enters, places his notes and text on the desk which dominates the center and front of the room. He asks, "Are there any questions?" After about a twenty second pause and no one responds he begins, "The greatest common divisor of two numbers is ...." and proceeds to write some definitions a few theorems, some examples, some homework problems and so on. Everyone is silently busy transcribing so they wont miss anything.

Jacki's roommate, Wanda, also has math at eleven o'clock but its in room 112. She enters the classroom as a number of other students are arriving. She hangs her coat on the back of a chair and sits down at one of several long tables. Another student is hanging a piece of paper on the wall; on it is a collage of multicolored designs she had made with the spirograph (a "mathematical design-making" plastic toy) she had taken home with her overnight. Other students are over at the metal cabinet in the corner taking out spirograph kits and carrying them to various tables. One student is absorbed in reading anecdotes and sayings from Benjamin Banneker's Almanac of 1793 all of which is on the wall on three long strips of photocopy paper. Three students are at the side of the room picking up new "short investigation" dittoes from the piles on an extra table.

The instructor is already in the room sitting at one of the tables (there's no "teacher's desk" or lecturn at all, let alone located anywhere). He has some of the plastic wheels from the spirograph kit. One is pinned to a piece of card board over a sheet of paper and he is moving the other wheel around it with a pen which traces as it moves. Some students are watching, others are working with their own. A number of the students are discussing the fact that given two wheels, the ratio of the number on the first wheel to the number of times it revolves around the second wheel (until it returns to the starting point) is the same as the ratio of the number on the second wheel to the number of times it revolves around the first wheel. (This ratio turns out to be the greatest common divisor of the two wheel numbers; although the students weem to be calling it a "wheel ratio." If the students can determine the "wheel ratio" of two wheels then it is an easy matter to predict how many times each wheel will revolve around the other). The teacher now passes out several dittoed problem sheets designed to help the students further investigate "wheel ratios" and how to determine them. Discussion proceeds.

The purpose of a mathematical environment is to provide an educational setting which can maximally facilitate the student-centered, inductive, discovery approach to learning which we are using in the Thirtee--College Program. The room itself is an important determinant of what may or may not take place in the class. Movable tables and chairs makes working in groups and decentralizing the class an easy, natural matter. We use a lot of equipment and we often become involved in investigations which require a lot of room to spread out. In the past it has been clearly evident that certain discovery processes we'd hoped would take place did not simply because the equipment could not be balanced or held on the small desks! Having interesting matematical things on the wall and around the room provokes interest and curiosity and it is psychologically more mathematical (if we want to think about unconscious aspects of working and learning). An "interesting" math course should be held in an environment which is both interesting and mathematical. In other words the medium is part of the message.

Experimental Mathematics and Short Investigations

One of the features of the Thirteen-Colleges Program which makes it innovative is the great emphasis we place upon having real things and experiences which to form concepts and base discussions. In the mathematics course this is vitally important. Part of the business of mathematics is the process of abstraction and generalized thinking; however, for an abstraction to be meaningful to a freshman mathematics student (as well as clear!) there must be some foundation or basis or model in reality. Even if we examine the history of most of our abstract mathematical concepts we find their origin in the investigation of real things or activities. Thus probability theory arose from dice games, analysis came from physics and network theory in topology arose from the problem of finding a Sunday walking tour through the city of Konigsberg. Although we worship mathematics as a supreme form of intellectual activity at least once-divorced from everyday life, we find that most mathematical creativity is grounded in intuitive, real experiences and the usefulness of mathematics can only make sense in terms of applications to the real world. In terms of a freshman course in the subject, from which students feel traditionally alienated, it is then important to be dealing with real, concrete, everyday, things and experiences and to build our mathematics upon these. The more concrete the thing or experience the clearer the concepts become.

Thus in the Thirteen-Colleges Program to develop and discuss a finite abstract algebra, namely Boolean Algebra which is the algebra of switches, we begin by making flashlights, something from everyday life. Then we continue by making more complicated circuits with wire, switches, batteries and bulbs, which is more complex than the ordinary life experiences of most students, yet still real because they have the switches in their hands! The students discover the series and parallel circuits by themselves. After the students have satisfied themselves exploring and recording the properties of circuits as complicated as they wish we gradually shunt the discussion to a more abstract plane, but at each point having the real switches to fall back upon to check the meaning and validity of the abstract ideas. An added insight for the students here is that after they begin to master the algebra and find that they can predict the properties of more and more complex circuits, they find it is easier than the experimental, trial-and-error method with which they began. Thus they naturally discard the equipment and are quite content to continue the discussion in an abstract way; but they still look at the circuits and analyze the algebra is never a problem.

We use materials like this as models in other areas as well. For instance in set theory we use attribute blocks and loops, and in probability we have an abundance of dice, crazy dice, colored cubes, pennies, there are puzzles, games and toys such as the spirograph (used for teaching the greatest common divisor of two numbers), tower of hanoi puzzles (one for every student) and so on. In each case the activity proceeds from directly dealing with the materials or game to the abstract mathematical discussion and the consideration of more and more complicated questions.

These materials are also, and perhaps more importantly, a medium for discovery. The materials, activities, games, etcetera which are chosen are ones which are inherently mathematical; contained within them is the mathematics which we seek to teach. Thus questions do not arise as mysterious, baffling irrelevant utterances by the teacher, but they arise as natural consequences of the students' interaction with the materials the games or whatever. When questions are raised by the students those are the ones we pursue; if not then the questions I raise as instructor are phrased in terms of what the students are doing. Hence questions about the greatest common divisor of two numbers is initially phrased in terms of how many times one plastic wheel will revolve around another and vice-versa with the spirograph set. The students discover important mathematical principles simply by interacting with the materials and a bit of inductive reasoning.

Many of the ideas, materials and their activities are based on or inspired by Whitman and Posey's unit, Topics in Experimental Mathematics, which is a culmination of the work of all the mathematics teachers in the Thirteen-Colleges Program over the last three years.

Following is a list of materials, equipment, games, etc. used throughout the year for the experimental mathematics aspect of the course. This list (some items are my own) and our total inventory of supplies has grown from year to year. So too has our understanding of how to use them in the curriculum.

Materials used in Experimental Mathematics

1. Friden Electronic Calculator
2. IBM 1130 Computer (using Fortran Language)
3. Switches and Batteries Lab Kit
4. Compasses, Protractors, Rulers
5. 3x5 Cards for Whist Fractions (continued fractions)
6. Oscilloscope
7. Napiers Bones (wood & paper)
8. Cuisenaire Rods

9. Colored Cubes
10. Attribute Blocks
11. Pattern Blocks
12. Balance Beams
13. Geo-boards
14. Jack's Rolling Pieces (Rolling along with Galileo)
15. Colored Plastic Discs
16. Dusyma Knupjerli (a construction set)
17. Dice
18. Solid Shapes Laboratory
19. Bali Buttons
20. WFF'N 'Proff
21. WFF'N 'Proff (Equations)
22. Spirograph
23. "What's Your Score" Puzzles
24. Pendulation (conservation of momentum)
25. Construct-O-Straws
26. Soma Cubes
27. Frying Pan Maze
28. Dr. Nim
29. Instant Insanity
30. Double Disaster (3-D Instant Insanity)
31. American Can Co. Puzzles
32. Qubic (3-D tic-tac-toe)
33. Tower of Hanoi
34. Triangle Peg Puzzle
35. Tangrams
36. Hi-Q
37. Stratego
38. Peg Jump Puzzle
39. Cross Puzzle
40. Wooden Die Puzzle
41. The Logi-Quad Game System
42. Chess
43. Moire Patterns
44. Game of Go
45. Psyche-paths
46. Cube Puzzle

Short Investigations

The "Short Investigations" are a series of one or two page handouts with problems for students to do or activities for them to try with questions. The object of the investigations is for the student to answer the questions or solve the problems and then carry the investigation further if he or she can, to generalize if possible. They are patterned after the kinds of questions we take up in class, and they are intended to give the students plenty of challenges to work on their own outside of class and, at times, to expose them to topics not ordinarily approached in the course (i.e. we essentially did Topology of networks this way). We used a large number of the Short Investigations in the Experimental Mathematics unit as well as a large number of others not included therein.

Within the structure of the course the students were required the first semester to turn in 15 investigations (which they could select out of 30 or 40 passed out). This number was reduced to 11 for the second semester. This part of the course was designed with the intent that students would be turning them in regularly over the course of the semester, come in for conferences to clear up difficulties, and I would give hints or corrections and allow them to work further on them for a better grade. They were graded on a 1 to 4 basis: 1 = the student wrote something (minimal) on the paper pertaining to the problem; 2 = partially correct; 3 = the investigation and stated questions were correctly answered but that's all; 4 = the investigation is correct and the student carried it further, extended the problem, generalized or in other words demonstrated some creativity or ingenuity.

The Short Investigations worked quite well with the better students and the more conscientious students. However, on the whole students tended to put them off until the end of the semester thus leaving no time for dialogue about their work. The idea of the investigation is great I just haven't found a way to implement them successfully. I hope to try some new variations in the future. There are several recommendations about them I have at this point (i.e. for the summer conference):

a. There is a great need for many more investigations.

b. Each one should be constructed on easy, intermediate and advanced levels.

c. They should be correlated subject-wise with various units in the course itself so that for instance a probability investigation could be passed out to the students a month or two before we get to the study of probability. This would expose students to the important questions before they arose, and it might serve to involve the class to the point where they would want to get into the subject sooner.

In my course I essentially left the students to work on the investigations on their own; they were free to consult any time they wished. Only a few times did we actually work on them in class. Perhaps more class work on the investigations would assure a greater degree of success next year.

Following is a list of Short Investigations passed out, including those selected from the unit Experimental Math and others not included therein.

Investigations Used

A. From Experimental Math Unit

1. Arithmetic Numerals
2. Finite Differences
3. Arrays of Squares
4. Arrays of Cubes
5. Tower of Hanoi
6. The Box Problem
7. One Hundred Dots

8. Squares, Cubes and Averages
9. Spirographs and Greatest Common Divisors
10. How Many (An Array of Triangles)
11. 3-D Tic-Tac-Toe
12. The Handcuffed Prisoners
13. Bees, Rabbits and One-way Streets
14. Konigsberg Bridges
15. Tree Graphs
16. Networks
17. Hoffman's Game Number Two

B. Other Investigations

1. Napier's Bones
2. Cryptograms
3. Trapezoidal Numbers
4. Cuisenaire Rods and Triangles
5. Minimum Surfaces
6. The "Smith-Robinson-Jones" Logic Problem
7. A Maximum Problem for the Mini-Skirt
8. Factorials
9. World Series Probability
10. The Horizon
11. Which is the most Unlikely?
12. A Voting Machine for Three People
13. A Challenge in Trigonometry
14. Programmed Reviews of Mathematics (Fractions, Lenear and Literal Equations, Quadratic Equations, Exponents and Square Roots, Logarithms, Introduction to Statistics)
15. A Problem in Logical Thinking: The Rectangular Table
16. "Magic Numbers"
17. The Generation Gap
18. Ishango
19. A "Proof" that there are no points in the plane within the circle except the center.
20. Two mathematical Challenges
21. Eclipses: Total and Annular
22. Last Year's Looney Graph
23. Fibonacci Squares (Reassembling a square into a rectangle)
24. Sums of Consecutive Integers
25. How Many Squares Do You See? Blobs?
26. Topology, Bridges, Networks
27. The No. of Shortest Ways Downtown or Topology and Pascal's Triangle
28. Analytical Thinking
29. Map Coloring: European Countries
30. What's My Set #1
31. What's My Set #2
32. Map Coloring: U.S.A.
33. The Hostess Problem
34. Investigations for the Electronic Calculator
35. Long Decimals
36. Investigations With Prime Nos.

37. Al, Bob, Carl, and Don (Logic Problem)
38. Adding up series of odd numbers
39. QxQ Chess Board Problem
40. Arithmetic Expressions (fractions, exponents, radicals) #1, #2, #3
41. Postage Stamps
42. The Animals in the Zoo
43. Piece of String (max, rect.)
44. Game of Hex
45. Mathematics of Easter

In general the experimental mathematics unit has been very successful. Its greatest strength is the degree of fascination and involvement it produces in students. Its greatest need is to be expanded. Students really appreciate being able to relax and "do things" in class. I find that the use of Experimental Math materials facilitate deeper penetration into the topics we study in the course than would otherwise be possible.

Experiments in Testing and Evaluating Students

We have explicitly emphasized in the Thirteen-Colleges Program that we evaluate students on much more than homework grades and test scores. We seek to evaluate progress of the student in achieving goals which are beyond the mastery of specified content. We want to be able to tell whether or not students develop positive personal attitudes toward mathematics; develop the ability to distinguish between good and bad reasoning, develop the ability to communicate mathematical ideas both orally as well as in writing, develop the ability to ask her own questions and seek her own answers. We measure these and other goals in many ways; i.e . class participation, written evaluations by students, participation in investigations in and out of class, conferences, comparison of written work over the course of the year, as well as tests of various sorts.

Continued experimentation with and refinement of tools of evaluation are needed, for in the last three years we have discovered and become increasingly aware of the inadequacy of traditional methods of testing. In many cases we have attempted to evaluate the students and the program itself by means of traditional examinations, and certainly if students do well on these it says something for the program. However it is a far cry from dealing with the effects of living and learning in a reality-centered environment, from measuring the total human experience which the 13-CCP attempts to create. Traditional tests have a number of rather negative aspects. They place a premium on competition, working alone and in isolation. They impose penalties on communication (called cheating), and the climate of such tests is one of tension and fear. Such tensions often reduce the intellectual ability and performance of students and thus the test is not a true measure of what the student has learned or can do. The so-called "stupid mistake" is one of the magnified tragedies of competitive testing. While the abilities to work on one's own and to see a problem through completely by oneself are valuable, it is unrealistic to test this way all the time. Life itself is much different. Civilization and man's culture is a record of his cooperative efforts. Often new ideas do come from single persons, but their further development is a result of communication and cooperation among many persons (This is what goes on in a discovery-approach-open-classroom as we attempt to establish a "real-life" intellectual atmosphere). The idea that a test should be a positive learning experience is not new, but in light of the fact that our whole course in mathematics is meant to be a "positive learning experience" it is essential to attempt to test consistently with this principle. Additionally I am convinced from the experience in the 13-CCP that students both give more and get more in testing situations which permit communication and cooperation.

What follows is a discussion of one experimental test, although a number were tried. Most of the ideas I have used before this test have come from what was "done unto me" wyen I was a student, i.e., the oral exam, the open book test, the intriguing problem test, the take home test. But I had never experienced or given a "community test." The idea came from Prof. Johnsie Posey, who teaches in the Thirteen-Colleges Program at Southern University, in dinner table discussions at the 13-CCP Winter Evaluation Conference in Washington, D.C. last March. The following is most of a letter to Mrs. Posey about a community test I gave.

> "...I just have to write you to let you know how fabulously well your testing idea worked. Similar to what you related to me at the conference, I gave the class three problems from probability. No books or notes were allowed, but otherwise they were completely free to converse, move around, go into another room to use the calculator and so on. And I required one set of answers for the class as a whole--everyone to receive the same grade. I also refused to accept papers before everyone understood all the answers and agreed they were acceptable to themselves as the class's answers.
>
> "The students really enjoyed it and regarded it as a positive learning experience. Below are quotes from their written evaluations I requested after the close of the test. But first are some of the questions asked.
>
> 1. A disc jockey has 25 records:
>   -how many ways can he (a) select five recores to be used in a program?; (b) arrange a program of five records?
>
> 2. 1331 is the 3rd line in Pascal's triangle.
>   What are the first five terms in the nth line?
>
> 3. Sickle-cell anemia is determined by a recessive gene(s). Call a Normal gene N. An ss child will die before maturity
>
> 4. a) If two heterozygous parents marry what is the probability of an NN gene combination?
> $P(N_s) = ?$ $P(ss) = ?$ NN and Ns will survive; ss will not.
>
>   b) If a heterozygous couple have five children what is the probability that exactly two will die in childhood from the ss gene combination?

"Some 'blocks in the bag' problems and variations on the above were questions I used in my other classes.

Some selected comments:

(1) "When you take those individual tests, you're under so much pressure that you can hardly think straight ... I think these type of tests should be given instead of those ordinary nerve-racking tests. Personally, I understood everything at the end of the test ..."

(2) "This was a very interesting and enjoyable test. I was more relaxed in this situation than before, because I was able to talk, swear, pull my hair and finally come up with some answers."

(3) "With a test like this I was more relaxed than with other tests. The situation was more like the class periods when we worked with various problems. This helped me recall easier. You don't have to switch from the daily classroom atmosphere, and this makes a difference..."

(4) "This kind of test, I think, is better than the other tests. For in the individual test there is no learning involved. The class test gave us the opportunity to learn more than a regular test."

(5) "I don't think that it could be that effective if used all of the time because it would make people lazy. To be honest I feel it would makemme very lazy."

(6) "...I conclude that this new style test is designed for students who understand and students who don't understand."

(7) "Many times when I was taking exams in math, I couldn't fully grasp an understanding of the problem. Most of the time it would be one tiny bit of information I'd forgotten, then the whole problem would be wrong. With this type of exam you have a chance to realize what's really going on."

"Most of the students really enjoyed it and felt it was a learning experience which traditional tests usually are not. There seem to be several criticisms of a test of this sort though, and I wonder if you have thought about them from the point of view of your own experience.

"Continually giving this kind of test would permit some students to goof off, become lazy and ride along on the work of their classmates. See comment #5. (One solution might be to never let the students know which kind of test they would have until the test is given). This business of laziness seems like it will be a problem in spite of the reduction of classroom fear and increase in student involvement and interest. There are always some students who will respond as little as possible. (My only counter question to this criticism is: how many students are working more because of the eased tension?)

"One student brought up the criticism that she felt that she might do better than the class normally and the class grade might end up as a dilution of her grade. This also would come about in her mind if poorer students were given the same grade as she (even if they all received perfect scores). She felt she deserved a higher grade. She's absolutely right in a way. At the end of the semester we must assign individual grades because of college requirements. Group grading only serves to question the grading system but not necessarily insure justice. Group work certainly is more realistic in terms of how we work in the"real world." Do we want to eliminate competitive grading?

"Another problem is: How can I know at the end of the test which students understand the problems and which do not if there is the pressure to "go along for agreement's sake?" I can tell somewhat by walking around asking specific students specific questions, but I am not sure how reliable it is.

"It has been fabulously exciting to me to try your idea and the students have almost all welcomed it. They want more like it. I'm going to write this up for CRG or my report or something (I guess I virtually have with this letter to you.) I believe you ought to write up your experiences with this test and the other one you mentioned that you tried (i.e. make up a sample space and answer as many probability questions as you can think of). I know this business of testing in math is a hang-up for many of us and we need the benefit of your creativity. Have you tried any others? You know we ought to write a unit called "All Kinds of Testing Ideas," a collection of ideas like the one in this letter with a short evaluation and samples of the kinds of questions which work and do not work, etc. Then teachers could choose innovative tests to suit themselves and students. One way to keep the student from getting too lazy would be to have a different "inovative test" each time so he would have to be prepared mathematically as the only prior insurance of succeeding."

The test emphasized the work of the students in a group and their ability to work and communicate with one another. This ability was a determinant of their success. It also required mathematical knowledge and mathematical thinking. Students were able to help each other and correct each other's errors to a degree I have never been able to achieve. It is tests such as these which we need to develop more of. We've only just begun to scratch the surface of what we could do in the area of evaluation.

An Impressive Discovery by the 9:00 a.m. Class March 26, 1970
-The General Binomial Expansion-

I had asked if the students remembered how to expand binomials such as $(a+b)^2$, $(a+b)^3$ etc. Some did; others were a little confused. Several methods came out and we put one on the board; the following one was what some students were doing at their table $(a+b)^2 = (a+b)\ (a+b) = a^2 + ab + ba + b^2 = a^2 + 2ab + b^2$ The students learned from each other how to multiply the terms: $(a+b)^3$ was put on the board after some students had made a guess that $(a+b)^3 = a^3 + a^2b + ab^2 + b^3$; there was disagreement necessitating working the problem carefully.

$$\begin{array}{rrrr}
 & & a & +\ b \\
 & & a & +\ b \\
\cline{3-4}
 & & ab & +\ b^2 \\
 & a^2 & +\ ab & \\
\hline
 & a^2 & +\ 2ab & +\ b^2 \\
 & & a & +\ b \\
\hline
 & a^2b & +\ 2ab^2 & +\ b^3 \\
a^3 & +\ 2a^2b & +\ ab^2 & \\
\hline
a^3 & +\ 3a^2b & +\ 3ab^2 & +\ b^3
\end{array}$$

After this I asked about $(a+b)^4$. We had been working quite a lot with probability and Pascal's Triangle so they quickly corrected $a^4 + 4a^3b' + 4a^2b^2 + 4a'b^3 + b^4$ to $a^4 + 4a^3b' + 6a^2b^2 + 4a'b^3 + b^4$ for the expansion of $(a+b)^4$.

They quickly concluded the coefficients of the expansions of $(a+b)^5$, $(a+b)^6$, etc. would go according to Pascal's Tirnagle. So we wrote some down using this pattern.

$(a+b)^5 = 1.a^5 + 5.a^4b' + 10a^3b^2 + 10a^2b^3 + 5a'b^4 + 1.b^5$ and we also did $(a+b)^6$.

My "curriculum intention" had been to relate this to probability, and since we had already achieved a formula for combinations $nCr = \frac{n!}{r!\ (n-r!)}$ to try to relate that to the coefficients in the binomial expansion proceeding from step to step this would have been the "natural logical" pedagogy.

But before I did this I asked one more question: "What patterns do you see in this expansion?" We already had Pascal's Triangle which they mentioned again. Someone noticed that the exponents of the a's decreased i.e. a^6, a^5, a^4, a^3, a^2, a^1, and the b's increased b^1, b^2, b^3, b^4, b^5, b^6, i.e. a^6, a^5b^1, a^4b^2, a^3b^3, a^2b^4, a^1b^5, b^6. Another student noticed that the sum of the exponents of a and b was constant, i.e. $5+1=6$, $4+2=6$, etc.

I asked: are there any other patterns? Two students said they thought they saw one involving the coefficients and the exponents. This was the point in the class that is so dependent upon the interest, excitement and involvement of the students. They were seeking patterns and the class was totally in their hands; all I was doing was writing down what they thought of. They were in the mood to generate patterns and enjoying the intellectual activity of discovery; this is something which cannot be forced.

They felt there was a pattern because in $(a+b)^6$ the exponenet of a in the expansion's first term, a^6, was the coefficient of the second term $6a^5b^1$. A short difficulty arose with the third term $15a^4b^2$. A bit of trial and error took place to try to establish the pattern; then we worked on $(a+b)^7$.

$$(a+b)^7 = 1.a^7 + 7a^6b^1 + \overset{21}{\frac{(6.7)}{2}}\ a^5b^2 + \overset{35}{\frac{(5.21)}{3}}\ a^4b^3$$

$$+ \overset{35}{\underline{(4.35)}}\ a^3b^4 + \overset{21}{(3.35)}\ a^2b^5 + \overset{7}{(2.21)}\ ab^6 + \overset{1}{(7.1)}\ b^7$$

The third term gave some difficulty because at first $6.7\ a^5b^2$ was written i.e. $42\ a^5b^2$; however the students knew that was wrong because Pascal's Triangle went 1, 7, 21, 35, 35, 21, 7, 1, so there had to be division by 2. They all got the pattern of how to go from one term to the next. I asked if it would be a good idea to write down a description or statement of the rule we were using. We started to, but several students insisted on going to the general case of $(a+b)^n$. (The inductive process is part of our souls now!) $(a+b)^n = 1.a^n + \frac{n}{1}\ a^{n-1}b^1 +$ (various expressions) $a^{n-2}b^2 +$

The third term was still confusing, but the problem was clearly that we were not quite applying our rule properly. The need to write it down was apparant and agreed upon.

We got: To find the coefficient of the next term multiply the coefficient of the first term by the exponent of a and divide by the exponent of b in the next term.

Then we verified our rule $21a^5b^2 = (21.5)\ a^4b^3 = 35a^4b^3$ which we knew was true.

We returned to the general problem with a clearer idea of the rule the class had discovered; and we got

$$(a+b) = 1.a^n + \frac{n}{1}\ a^{n-1}b^1 + \frac{n(n-1)}{2}\ a^{n-2}b^2 + \frac{(n^3+2n^2+ 3n)}{3}\ a^{n-3}b^3 + \ldots$$

The term $\frac{n^3+2n^2+3n}{3}$ was strange, a number of students didn't know how the student who said it, got it. So we decided to check it. If $n=7$ then the 4th coefficient must be 35, but $\frac{7^3 + 2.7^2 + 3.7}{3}$ was way too large. Were we applying our rule? No. Being more careful (and purposefully not multiplying the terms out which was what had just caused the confusion) we got

$$+ \frac{n(n-1)(n-2)}{2.3} a^{n-3}b^3 \text{ and for } n=7 \text{ that was } \frac{7.6.5}{2.3} = 35$$

The next term was $+ \frac{n(n-1)(n-2)(b-3)}{2.3.4} a^{n-4}b^4$ but it was noticed that $2.3.4 = 1.2.3.4 = 4!$ So we wrote the next term as $\frac{n(n-1)(n-2)(n-3)(n-4)}{5} a^{n-5}b^5$

Everyone had the idea now. Not everyone had done the discovering, but (this is very important) everyone followed and understood how we were getting the formula for (a+b) . This was not a mysterious theorem from a book or a teacher but something which came out of the minds of the students themselves. Progress in the development of the formula could only take place when the class understood what was going on.

Finally I suggested that they let n=6 substitute it into their general formula and see if it gave them the correct result.

We spent a few minutes discussing what we had just achieved both mathematically and intellectually. I was genuinely impressed by their discovery and by this evidence of their ab ility to take a problem, explore it, discover patterns, extend relationships and finally to perform that truly creative intellectual activity; to generalize the results. It iwas even more impressive because the problem was more abstract than usual.

Many of the students were familiar with the binomial expansion from high school: some knew that there was a formula but could not recall it. One said she had been given a formula for $(a+b)^4$ in school, that they had verified and that her class had had a very baffling (to them) explanation of the origin of the formula, but that no one really understood. This discovery approach was such a welcome contrast for her.

In spite of the fact that many students were familiar with the binomial expansion prior to this course, the discovery of the formula had proceeded quite independently. One student was immobilized by her attempt to remember the formula. The discovery had proceeded directly from the problem and the patterns inherent in it. The students have had a lot of exposure to Pascal's Triangle. But most important this class experience exemplified their increasingly sophisticated grasp and use of inductive reasoning which has been a central theme of the Thirteen-College Program mathematics course.

THREE UNITS ON SOCIAL INSTITUTIONS

Harold Franklin
Social Institutions
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The Family

We first talked about our own families because each student came from a family and secondly to let students see that there were differences in some families in their classes. We then asked the students to further tell us about their hometowns, cities, etc. Specifically I wanted each of them to realize that their respective families were a part of a greater unit--the political, economic, religious, social, etc., forces of the United States and foreign lands as well. We then pointed out some of the salient features that some of the students listed such as the types of government (city) that they had in their hometowns--some had the commissioner form of government, others had the mayor-council form, and others had the city manager to run the city's business. We talked about their religious institutions and as could be expected, more than ninety percent of them were Baptist. We had some Catholics, Presbyterians and two students said that were seriously considering the Islamic faith (Black Muslims). This provoked quite a bit of "why's" and a heated debate on the pros and cons of the Muslims and their philosophy.

As I pointed out earlier, we were looking at individual families and how they effect the many institutions and how the institutions effect the families. Examples are as follows: We are all aware of the economic system of the United States but we also know they they were the last hired and first fired. Politically we run into more problems than do our white counterparts.

But even before marriage there are peculiarities among certain groups of blacks such as choosing a mate of lighter complexion, the why's of this middle class phenomenon; versus the lower classes who do not seem to worry about complexions of mates.

After marriage what or who will run the family affairs--father (patriarchal) or female (matriarchy). We found out that in reality, most families seem to be female dominated. Yet in the slums (using Elliot Liebow's Tally's Corner as a guide) the male seems to rule, but on the other hand there are too many families without fathers for one reason or another. In fact some of our students fall into this category so they were able to set us straight on why it happened in their families. We also talked about Negro birth rate but not a comparative study of rural vs. urban rates. Housing patterns we did look at and two of the best projects dealt with slums and urban renewal.

The discussions were continued with peer and status groups also found in Tally's Corner and Achebe's Things Fall Apart. Under this we looked at the "generation gap", youth rebellion (on college campuses only), whether there is a such thing as cultural lag, and identity, which always bring out quite a bit of vocalism from students.

We used the record "Color Him Father" by the Winstons to help our students see one family and how the father was perceived by one individual The movie "Nothing But a Man," which arrived late was also used to see the struggles of a black family as it strives in a southern town.

Since we wanted to look at at least one other type of family, we chose the Kibbutz, a socialist community of Jewish people near the Red Sea. The students always had to be reminded in their evaluation of the Kibbutz that they (students) were using their own standards by which to judge the Kibbutz. Since all of them were so critical of the Kibbutz I asked them to make the neessary changes but after careful evaluation the students realized that if they tried to modify the Kibbutz, they would create more problems than already existed. But they had fun trying to figure out a way to modify the Kibbutz. Also, Mr. Syed Yunus, an Indian, spoke to our class so again the students could see how other families lived. As much as they could understand, they talked at length for two days and thanked him for shedding light on their concepts of different people.

Some concepts that they became familiar with are: polygyny, polyandry, nuclear family, extended family, patrifocal, matrifocal, matrilineal, patrilineal, etc. Incidentally, the material on the Kibbutz was taken from Queens, Families In Various Cultures. Fraziers' Negro Family was used for its "Middle Classicism."

Since families move, we thought about combining the family with racial identity. Specifically moving (uprootedness) is typical of modernized society. But what happends when one of our students leaves home for Talladega College? What about the old friends who were left behind, who will mow the lawn, or wash the dishes while big sister or big brother is at 'Dega? How will sister react to 'Dega? What about new friends which she will surely find? Can she adjust away from home? All of these questions and others were good to get us into the discussion because these were real for our students. Value systems, culture people and places became important because a number of students adjust rapidly while others call mom and dad each night because of their loneliness. One student told the class that she and her rommate could not get along, yet another told of her new experience as compatible; while still another said that it take her long to learn that you have to tell the other students off every now and then but each said that at home, their lives were much better than living with a new person. The students told as to wheter they were forced (involuntarily uprooted) or whether they came to Talladega on their own (voluntary uprootedness.)

Some objectives that the students displayed competency in was as follows:

1) the impact of social change on human beings
2) the causes and trends of horizontal and social mobility
3) able to develop a hypotheses
4) the value system and their significance as instruments for determining human behavior.

Furthermore they should be able to do the following:

1) able to utilize library facilities
2) to be able to think critically and analytically when discussing or writing

3) to be able to make generalizations not discussed directly in reading materials.
4) to be able to make valid value judgments.

Achebe's Things Fall Apart depicted beautifully uprootedness, P.L. Dunbar "We Wear the Masks," Liebow's Tally's Corner and the movie, "A Raisin in the Sun," also helped us with this unit. "Fahrenheit 451," a movie, was also shown but was too late getting here.

The major activity was a debate.

RESOLVED that Modernized Society Leads to a Loss of Identity. The negatives won according to a member of the English department and two excellent English seniors. The students thought I was crazy when I suggested the title of the debate but I enjoyed it and so did they because from all indications each of us like competition. Also the students knew how critical I was and am about grammar, research, etc. so they really bustled and the positive side was rather disappointed for losing.

Another minor activity was the class writing on the following subjects:

1) The Effect of Uprooted Persons upon Society
2) Voluntary Uprootedness
3) Involuntary Uprootedness
4) The Search for a Black Identity

Power -- Politics and Election

We approached this unit by reading The Man by Irving Wallace, a novel about the first Negro President of the United States. The first reaction from the students - "this has to be a joke - one of us as president?" Nevertheless it provoked quite a bit of interest because of its characters and the problems the executive faces in his daily routines.

Next we created our own case study. We had "The Ugliest Man on Campus Contest" with one male student in my classes as contestants. They were supported by either two or three female students. The female studetns were to serve as campaign managers and workers. We actually had two contests - one of students and one of faculty men. The purpose of the election was to study. Also one had to create an election because there was none around which we could analyze.

The election got off with the students appealing to the student body to cast their votes. The contest was appealing in more ways than one. First of all, each student tried to win right from the beginning with posters, letters, campaign speeches, parades, etc. Secondly, we set a record as far as student voting was concerned. Out of a total of approximately 550 students, 453 students cast votes - better than the election of the Student Government could do. No one won a clear majority which meant a run-off between the two top students and the two top faculty men. The young man who led the ticket in the primary also won the run-off and the same applied in the faculty division. The students counted the ballots, posted results and analyzed why the winner won. They all agreed that he spent more time soliciting votes writing each student a personal letter, unique posters, etc. I personally figured that he would win. He also went into the library and studied techniques of successful politicians as well as talking to a number of black elected and appointed officials in Florida whom he knew. This was interesting because this young man also did a study of black elected officials in Florida on the computer and then did the statistics on hand so that anyone could understand his project. Finally, this young man was given a summer job by one of the officials because of his interest in politics. Incidentally, yours truly won the faculty division of the Ugliest Man on Campus, but only because of his popularity and not because of his ugliness (smile.) The students also analyzed my victory and they said that I treated the students like adults and they predicted that I would win easily, which I did.

Next we invited some black officials from Ridgeville, Alabama. Ridgeville is an all-black town of 200 who are just getting started as an incorporated town. As director of the Alabama Center for Black Elected Officials I would easily ask persons to come and talk to my classes. Those that appeared were Mayor Eadcher Lawrence, Mrs. Willis, City Clerk; Mrs. Elethia Richardson, President of the Industrial Relation Board and Mr. Willie Gibbs, City Councilman. The students all got a chance to talk to these officials and vice versus and we also recorded this conversation on tape, which will be attached to this unit along with photos, posters, placards, letters, etc. on this unit.

Floyd Hunter's Community Power Structure; C. Wright Mills, The Power Elite and Arnold Rose, The Power Structure were also used as references in this unit.

We looked at Marbury V. Madison as a landmark case of the judiciary. This was also reinforced by It is So Ordered by Daniel Berman, a study of the Supreme Court's decision better known as Brown vs. Topeka, Kansas Board of Education.

We wanted Gomillian vs. Lightfoot, the Tuskeegee, Alabama gerrymandering case but the book was out of print. Some of the activities of this unit was mostly questionnaires about the community. One is attached here for observation. But we really never got a chance to do a case study of the legislative branch of the United States Government. Since I am a staunch supporter of all the units that we worked out the summer of 1969, I feel that all of them are needed and if taught the way we have attempted, I feel the students can grasp the substance of the units much better than the memorization process that most of have been taught to do.

We did not get into the sub units - COVERT AND OVERT SOCIAL CONTROL. Time did not permit us, so we went directly into the last sub-unit of this unit which was entitled "Conflict and Change." We specifically studied revolution as the means to disorderly process or change of power, The Anatomy of Revolution by Crane Brinton. This, of course is a general work but the students found it readable and understandable. We did however, use newspapers and magazines to look at student revolts. We wanted to see if they (the student revolutions) were in accord with the basic premises of Brinton. Strange as it may seem the unit did [not(?)] evoke the enthusiasm that I had thought it would. Maybe I should have gotten a tape by Malcolm X or Cleaver, Carmichael, etc. or possibly a recording to introduce students to the unit. Since Brinton's book covered the American Revolution, Russian Revolution, French Revolution, and English Revolution, and with students reading other books on these countries, it consumed quite a bit of time - in fact longer than we had anticipated. There are innumberable sources such as The French Revolution; Williams, Russian Revolution, Moorehead and essays all taken from The Western Tradition, Eigen Weber; and Arthur I. Waskow, From Race Riot to Sit-In, etc. Students chose books and were available.

Black Experience

This unit was handled from a historical point. This unit was not hard to get the students to understand because they had looked at the black family and we had already hit on some points especially how the black "family" existed during the institution of slavery.

Nevertheless, this unit was introduced with the assertion that man began in Africa. This comes from Robert Ardrey's, African Genesis where the Leakey's claim that the oldest remains of man were found near the Aldonai Gange near Kenya, East Africa. From there we preceeded with the Guide to African History by Basil Davidson and the first three chapters of John Hope Franklin's From Slavery to Freedom. Parts of Paul Bohannon's African and African, Davidson's Lost Cities of Africa, Before the Mayflower, Lerone Bennett and Oliver and Fage, Short History of Africa. We traced Africans from Kenya to North Egypt and then to the West looking at Ghana, Mille, and Langhay, along with the Hausi States, and the Mossi States. We spent most of our time on West Africa because of our heritage and the African slave trade. Excerpts of Davidson, African Slave Trade was used for its depth. We looked at Prince Henry of Portugal then Spain, France and England as they engaged in the slave traffic. We traced slavery from Africa to the Islands and then to the Colonies in the Mainland, later known as the United States. We looked at slavery from the economic, religious, social and political overtones. Most of the students came to realize that slavery has always existed but they learned the differences of slavery as it had existed in other places and other times.

This was a rather unique unit because quite a bit of the materials in the unit had been covered in the other units. When we studied the family we could not have attempted an objective job of looking at the black family without comparing its existence in an African setting and then in the slave setting.

To give a fair evaluation of all materials covered, I feel that each unit served its purpose and not a single student complained this year. Last year we had too much and [illegible] many readings but this year I feel that we overcame that problem The readings were compatible to the majority reading ability. The students enjoyed the entire year but they spent more time in role playing. I also feel [illegible] this class was more homogeneous than last year's classes. The class this year worked better together on projects than last year. In fact [illegible] one time during the entire year did a group complain about each other. The final grades reflect also the homogeneous of the class as compared to last year. One problem that we had more of this year than last year and there was too much cutting of classes by far too many students and I feel something should be done about this administratively. We teachers can only report the cuts and that is all. To make bad matters worse, the students spent so much of their time in the snack bar playing cards with the upper classmen - nothing constructive came out of it.

In closing this report I would like to point out that all projects which have been done by students are locked in my office for display. The students gave permission for us to keep the projects. This brings me around to talk about some of the best projects. One is an urban renewal project where the young lady actually used lego blocks, autos, etc. to build the project. Also she wrote her project up which include photos of slum dwellings.

The other excellent project is one in tutoring at Westside Elementary School by two students. They worked hard at this project and also wrote them up with samples of students' work, photos, etc.

Another young lady undertook as her project, writing for the Ridgeville Bulletin, an all-black newspaper published by the city of Ridgeville.

All in all, this I feel has been a fruitful year with each student a little better prepared for college and life than before they entered Talladega College.

FROM SELF-TESTS TO AN UNPLANNED LAB

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This year was the self-study year at A. and T. State University. There were many meetings of the Faculty and students together and many meetings of the Faculty and students separately. Therefore, I planned to get in most of the work dealing with the four major topics and fuse the important, closely related areas of the other three units. This worked out very well as the students were nice about coming in during the evening or on off-scheduled periods to complete the work.

The secretaries were very busy so it was difficult to get work duplicated. Since I had enough copies of most laboratory experiments from last year, I used them. They covered the same material used in the Teacher's Guides.

After the self study ended, I was able to get the necessary secretarial work done so we were able to get copies of the projects on Gibberellin treated seedlings and Hormone treated Frog Embryos.

I had tried the approaches in the Guide before. I knew they were good and would work so I tried building approaches on current news events on general conversations, or questions asked in one classroom session, that were related to the following or later units. We keep daily logs so that it is not difficult to make back references.

The first semester, the students were more talkative but did not read as they should. We read together on off schedule time and the students enjoyed it. The second semester, the students were not talkative and did not take notes. The first one or two weeks, I checked notes after the discussion. I stopped checking notes for two weeks and started giving ten minutes open-book quizzes. Again, they had not taken notes neither did they understand concepts developed, so their grades were low on the tests. In the two sections, the grades ranged from 31 to 70 and 19 to 60.

I asked . students to come in individually to discuss any part of the course that is not clear. This quarter, most of the students only came by to discuss what they missed on the test. This is because I never return a test paper until after the student goes through the exam and his paper with me personally. I try to encourage them to come and discuss the material before the exam. Since the discussion of the first exam, they are reading more; in the last two tests the grades ranged from 55 to 93 and 56 to 82.

Most students work for 15 hours a week and they say that they have a limited time for study. I do not think that 15 hours a week should effect their study too much.

Progress Inventory and Self Tests:

Progress Inventory Tests were given for the first two units. The students wanted an hour to do these tests. It was alright if they could come back in the evening to take them, but many students were working. They thought that time would be best spent reading together, so we did. I shall use the Progress Inventory again with Genetics because students should be able to express their thoughts more easily now, and because Genetics indirectly covers concepts learned in other sections. I duplicated the outlines and gave each student a copy of The Nature of Science and The Cell. I asked the students to work out the self tests. Only a few students wrote them out. Others said that they did not think that they had to be written. I told them that writing out the answers would help them to formulate their ideas when they had to write out answers on the exams.

Programmed Study and Procedure:

I duplicated the Programmed Units from the book, Life on "The Molecular Aspects of Biology," "The Cell - Unit of Life," "The Cell - Its Metabolic Machinery." I gave each student a copy to study over a three day weekend, preceding the week for the discussion of the same, Thursday to Monday. I told them that I would be available all day Friday and Saturday if they needed help. Monday when I asked them to return the copies, only a few students had looked at them. I think that the Programmed books are good and could be used with any Biology text for working out a unit. Since our students have to discuss rather than give one word answers, they cannot just read the answer from the book without putting the idea in their own words.

I like the course as outlined this year because the approach could still vary with the students' attitudes and interests. Yet, it was not difficult to redirect discussions into some of the major concepts.

We were able to refer to a large number of the scientific papers which we received at Tufts University in 1968. I found direct references to the specific information in many chapters. At those points I introduced a short section from the paper and referred the student to the text to complete the concept. Many students asked to read the original papers. This gave the student who was interested, a chance to look over the paper and emphasized to those not interested, that scientific statements are based on research and accepted or evaluated according to their testability. Answers based on emotion and superstition are of little value scientifically, unless they too can be tested and retested.

I tell the students to always look up terms that are unfamiliar. They think that if they read far enough they can get the idea without using the dictionary. Yet, when I give them other reading using the same vocabulary, they are lost. When we read together, we define every term that is not familiar.

I think the students identify themselves with every discussion. It becomes personal so they hesitate to pronounce terms or try to reason out what could happen. They sigh when we sacrifice the experimental animal, or say "that's a shame" when we extract hormones by grinding tissues. They finally change their attitudes and become involved.

Books, Tape Recorders, and other Equipment:

I gave each student a copy of Life. I placed on BSCCS and one Biology by Helena Curtis between two students. They carry these books to their dormitories.

I did not receive new reference books this year because I was trying to get other equipment. I hope to get many reference books next year.

Our students still prefer the BSCS - Blue Version. I permitted them to lead the discussions and they used materials from three books. It was necessary in order to answer the questions that came up.

I received 10 stereoscopes and I borrowed 14 from the Biology Department. I received more culture dishes, fish bowls and dissecting equipment. Many students were able to work alone wherever it was more desirable. One student, always the last to decide what she wanted to do, was left to work alone on several occasions. She thought she would just look on. I limited the size of the group so I gave her a set up and promised to work with her. I left her alone to work so much that she did a good job working alone. Now she gets into the experiments with the other students.

I could use two more electrolysis units. I could place one on each of the three tables and let students work out the experiment in groups. Now I ask for volunteers to set up one demonstration of electrolysis and the other students read directions, make suggestions and record the rate of evolution of Hydrogen and Oxygen.

The department has two tape recording machines. They are to be checked into the office at the end of the day. I need a tape machine as a part of Biology. When I started recording, most students were interested in reciting and they made greater efforts to become involved. The students can hear and know when they are really conveying their intended message.

My greatest efforts are made in trying to get the student to be able to express his ideas. I believe that if he could "say it," he could "understand it" better when he reads his assignments. After using the machine two days, the amount of participation doubled. I do not have time to pick up and return the machine each day.

I asked questions before and the students made hand gestures with their mouths open and said nothing. With the tape recorder they really try to "say it."

Projects:

The students enjoy the laboratory sessions. Extended experiments using living organisms are set up or initialed and terminated by everyone in the class but the care and daily recordings are done only by interested students. We did the testosterone chick project again. One student was afraid of chickens. I never insist on a student doing an experiment that might make him sick. She did the other project.

We completed the project on Hormone treated Frog Embryos. We placed them in different concentrations of Iodine, Thyroxin and Triiodothyronine. We used two sets of tadpoles, a very large tadpole and a very small one. I ordered Rana papiens. The air conditioning was off for a while and most of them died. Dr. Graves gave me two sets that were collected by the biology majors so we used them, In four days, the experimental animals had hind limbs but the controls did not. We placed all of the tadpoles in 70% alcohol so that we could study, comparatively, the development of all animals within the same period of time. It was very interesting.

One class set up the Project on the effects of Gibberellic Acid on the growth of Alaskan Peas (green, wrinkled, tall) and Little Marvel Peas (green, smooth, dwarf). I told the Botanist about the experiment and asked if he had any seedlings we could test while involved. He brought some squash, wild clover and grass seedlings. The second class set up the squash and clover and treated them with Gibberellic Acid. This project has not been terminated as yet.

Seminars:

The seminars were very interesting. Our first unit was on the Nature of Science. We were discussing the origin of the Universe and the first living cells beginning with the primitive atmosphere. One student said, "Mrs. Clark, if you believe this, you do not believe the Bible." Then I asked if they would like to have some authority on the religious theories to speak to them and they voted 100% "yes."

Dr. Cecil Bishop has a Bachelor of Divinity Degree and a Master of Sacred Theology degree. He also has a lot of experience in pastoring and civic work. He spoke on "In the Beginning - What?" After discussing the many theories on the origin of the universe and life, he stated that, to interpret religious theories, we must keep in mind that these theories were humanly arrived at some years after the birth of Christ, and that he could accept the modern scientific reasoning. The students were set to give him a rough time but I think they had a greater appreciation of science and religion after the seminar.

Dr. Miller, Biochemist and President of Bennett College, gave one seminar on "The Chemistry of Digestion" and another on "Chemistry of Inborn Errors of Metabolism." He emphasized errors in chemical reactions that were present at birth, hereditary or may be caused by the lack of some gene (or essential enzyme.) The students asked a lot of questions on diabetes; alcoholic effects on blood sugar level; the effects of too much insulin; Why can't one just stop using alcohol until the blood sugar level is restored; Would this cause an instant physiological response; Could damage to a gene be responsible for diabetes or alcoholism; What is the effect of insufficient insulin; Why do people have proteins in the urine; sickle cell anemia; What causes Malaria; Relation of Malaria to Sickle Cell Anemia; Some people outgrow allergies, do they outgrow Sickle Cell Anemia. There was quite a discussion on allergenic substances.

The last seminar was on Gestation Cycles, given by Mrs. Jackson, a former graduate of A & T, who is now Assistant Professor in Nursing, Psychiatric Nursing, Maternal and Child Health Nursing. The students came in 15 minutes late. They usually are on time. I was beginning to be concerned. A popular band concert was on campus at the same time.

Mrs. Jackson brought several series of transparencies on the Male and Female Reproductive Tract and the Hormonal Control of Reproduction and Child Birth. She asked a few questions and the students answered readily. She put all of the transparencies aside and asked "What can I tell you that you do not know? " She passed out a list of topics (attached) and asked what would they like to know within the realm of the sheet. The students said that they did not know the terms. She started talking, inviting questions as she talked, and finally every student was involved. They usually leave at 8:15, but they talked until 9:30. They had enough background to understand very well.

All speakers were very impressed, have offered us additional reference books and have promised to return in May.

Possible Curriculum Changes:

I have participated in several Institutes, have learned many skills, and much information. Not having a doctorate degree, I could not effect a change in our biology curriculum. I could innovate my classes to a limited extent, but only my classes. We were asked to keep the classes basically alike. Naturally the head of a department could not change course offerings every time a teacher attends an Institute.

But when many schools with similar problems have teachers and students come together to study their curriculum; gather motivating, basic and interesting material and formulate methods of solving their problems, a department head will consider changes in the curriculum related to the curriculum study. A curriculum study should follow a series of subject matter institutes before actual change in curriculum occurs.

Upon entering this program, I have grown. My ideas have been heard, blended with others, have been refined, have been tried by other teachers and students, and now indirectly become a part of the teacher's Guides. I talk freely of each lab and discussion session with everyone. Recently I have observed students in regular program sessions doing blood smears, making genetic studies with insects, reading and making research paper reports and having evening tutuorial sessions as innovations in the biological science classes. As soon as we devise a manner of conducting a discussion session with large groups, our department head is ready to try a part or all of the program when our guides are finalized.

In the traditional program the students have three lectures and one lab. I believe that if the students had two labs, one discussion in a large group and individual help from the teacher, also the evening tutorial sessions, our program could be worked in possibly with some adjustments. I think most learning comes in the laboratory and individual or tutorial sessions where the students are free in their discussions.

The Thirteen Colleges Curriculum Program is completely different from the other Institutes I have attended. The subject matter Institutes were designed to meet the needs of the teacher with reference to enhancing the subject matter background, to giving the teacher an opportunity to talk with those having similar interest and forming a basis for relating student problems, school offerings, facilities and methods of solving problems.

A teacher should attend subject matter oriented institutes in order to keep up with the recent trends but in order to introduce needed changes into a curriculum (which is not done every day). There should be a curriculum study in which new procedures can be tested as to meeting needs of students and teachers, students interests and equipment requirement.

The Discussion of The Male and Female Reproductive Tract Took an Unpredicted Trend

I had planned to show the film on Human Reproduction but someone else was using it. We assembled as usual. I asked who would like to start the discussion on the male and female reproductive tracts. No one spoke. "Shall we take the male system first?" The girls chimed yes, the boys roared no. Then I asked why? The students were actually ashamed to try to pronounce the terms. They giggled, placed their hands over their mouth, eyes or lay their heads on the desk.

Then I suggested that if we take the male reproductive system first, we could take the female reproductive tract and continue through childbirth. Everyone agreed. I asked which of the systems that we had just studied was closely associated with the reproductive system. No one answered. I told them to turn to the diagram of the reproductive system and tell me. Readily they recognized the bladder as a part of the excretory system. I asked if they could recall any other part of the excretory system that could be directly or indirectly associated with reproduction. They gave the following statements:

Waste from mother and fetus is filtered out by the mother's kidney.

The antidiuretic hormone was related with water retention and the hormone is produced by the pituitary gland.

In males the sperms and urine are passed out through the same canal. Many students said that this was true of females also. A few students had read the assignment and questioned the idea.

I suggested that we try to discuss the two systems before we come to a conclusion about differences. The students had a lot of erroneous ideas. They spoke of female and male eggs, of ovaries in follicles, of urine passing through the testis and others. They were so sure that these ideas were true that they did not read the text for several days. These students made up a small minority. Many students will not bother to read, yet they will argue about simple information that can be found in any book.

We finally identified each part of the reproductive tracts and studied their functions. I took the functions from the book, Anatomy and Physiology, Volume 2, College Outline Series. The students had to take notes. They remembered that we had studied gametogenesis in the study of the cell.

In discussing the male reproductive system, we mentioned that the prostate gland secretes a thin slightly alkaline fluid which is believed to alkanize the urethra and activate the spermatozoa. The following discussion followed:

I asked the students if they would say that the pH of the urethra is 7, less than 7 or more than 7. One student said that it depends on the individual. I said "Yes, I should have said that in order to activate the sperms, should the urethra have a pH of less than 7, 7 or more than 7. A question has to be specific in order to get a definite answer; likewise our answers have to be specific in order to be evaluated."

"You see, Mrs. Clark, we are teaching you how to ask questions," and I replied, "Thank you dear, frequently I need your help." They were surprised that I did not object.

On student continued, "Oh! I remember now, readings from 7 to 14 are alkaline so the pH must be more than 7."

(From here on I shall use S for student and T for teacher.)

S. - Mrs. Clark, I read that a person can control the sex of a new born baby by making the environment acid or alkaline. Is that true?

T. - There was a write-up in Look Magazine recently explaining the phenomena. What environment should be made acid or alkaline? Are sperms active in acid environments?

S. - The X sperms are but the Y sperms are not.

S_2 - Golly, what do they mean by X and Y sperms. Are there two kinds of sperms in a normal male? Do females have two kinds of eggs? Why are men so important in determining sex?

T. - Let me write all of these questions on the board. First let us complete the parts and functions of the male reproductive tract and then we will try to answer these questions.

S. - You just explained the function of the accessory reproductive glands in the male. That was the only thing not clear.

T. - You remember that in meiosis there were pairs of homologous chromosomes in the nucleus. Well, on one pair of chromosomes - called sex chromosomes, there is a pair of genes which influences sex. One type of gene in males is called X, the other is called Y. When the two chromosomes separate in the anaphase stage and finally four sperms are formed, two sperms will have genes for X traits and two for Y traits. (We had studied gametogenesis). The oogonia has two X genes so that any egg that develops normally will have an X gene. In Genetics you will study other variations.

S. - So the alkaline urethra could only activate the Y sperms. It could inactivate the X sperms.

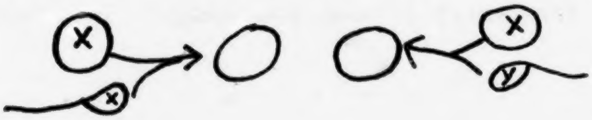
T. - What environment would have to have a controlled pH in order to have a male or a female child?

S. - That would have to be the male urethra and the complete female reproductive tract excluding the ovary.

T. - Do you know now why it is important to know the parts and functions of the reproductive tracts?

S. - The class chimed in, "Yes Mrs. Clark, in order to interpret modern research information."

S. - You still did not explain how a boy or a girl could be formed. I drew two eggs and two different sperms on the board.



Which could genetically develop into a girl and which one could develop into a boy?

S. - Why do you say genetically - could anything keep the XY zygote from developing into a boy?

T. - On the basis of your chick study, could you imagine such a phenomena?

S. - Finally a student said, "If something could happen so that the hormone precursor would not develop into testosterone, a male would not develop. If male hormones were injected into a new born baby girl, would the hormones effect the sex?"

T. - I suggest that we look up some research on injecting human beings. From our past reading it is conceivable that the enzyme system could convert the hormone into female hormones, or merely effect the secondary sex characteristics. Agin using your chick project as a reference, what do you think could happen?

I was glad that I found a tangent point in the chick project because I did not want to get into genetics until after we had completed the hormonal control of the reproductive processes. I had no idea that a study of the reproductive tracts would lead to this discussion.

An Unplanned Lab Based on Keeping Students Aware of What Is Happening Today

The first section had completed working with the chikens. I had germinated seeds to be used in the study of the effects of gibberellic acid on Alaskan Peas and Little Marvel Peas. The seedlings had to be set out today.

I passed out the direction sheets and asked each person to read through the experiment to become familiar with the background, the materials and the set up. Even though they had directions they came to me to ask, "What should I do next?" I asked them to follow the directions except one thing. Instead of planting five of each type of seed, they should plant two of each type. Each student should plant a pot. With four students on each side of the table forming a group, there would be four experimental and four controls. This was finished in thirty minutes.

After these were completed, I asked how many students were keeping up with Apollo 13. There was no discussion. Then I asked if any part of our recent experiments or discussions could help us to understand the condition of the astronauts. There was no discussion yet. Then I asked if Apollo 13 would be able to land on the moon.

S. - "Oh! You mean that something went wrong on the Apollo 13?"

T. - What happened on Apollo 13? No one knew. I told them that there had been an explosion in the service module. The astronauts had to enter the command module and close off the service module where the explosion occurred. Then I asked if the explosion could effect their respiration? One student said that their respiration was the same as ours. I asked if breathing on the mountain is the same as breathing on a low plane? Finally a student said that as we ascend the mountain the amount of oxygen decreased per unit volume. Then I asked if there were oxygen out in space near the moon? A student recalled that astronauts had to carry their own oxygen with them.

I reminded them that with the explosion a lot of carbon dioxide was produced. "How would this affect the astronauts?" Finally someone said "It would contaminate their supply of oxygen. They would have less oxygen for respiration. Concentrations of carbon dioxide over 0.04 parts per unit are toxic to man."

T. - Since there is no way to increase their supply of oxygen, what could be done to purify some of that present that had been mixed with carbon dioxide. S. - Purify it. T. - How? S. - If we could find something that would dissolve the carbon dioxide, then it could not contaminate the air.

At this time I had them to turn to the experiment on Metabolism, measuring the carbon dioxide produced (BSCS, Blue Version). I asked if they were familiar with the indicator, Phenolphtalein? They said no. We recalled the discussion of pH and decided to see what reaction we would get using phenolphthalein with an acid and then with a base. In the acid (hydrochloric acid) the indicator was colorless, in ammoniumhydroxide the indicator was red.

T. - Knowing this, how could we determine how much CO_2 was being produced?

S. - Put an indicator in it and when it turns clear an acid has been formed.

T. - What is it? You said put an indicator in it. Finally they suggested passing the CO_2 formed into water containing the indicator. The water will have a red color with the indicator before CO_2 enters and a colorless appearance after CO_2 enters it. I asked why the water and indicator would be red, and a student said that if you put a few drops of ammonium hydroxide in it, a red color should appear.

T. - What made the system become colorless? S. - The water became acid. T. - How? S. - The CO_2 combined with the water to form an acid.

After reading the students directed me in setting up the experiment. Some students helped assemble the apparatus. We set up the experiment removing CO_2 from the air in two bottles of lime water and then passing the air into another bottle containing an animal. The air from the animal was directed into distilled water containing an indicator. The experiment worked nicely. We used the chicken and the hampster which were warm-blooded animals, and the frog, a cold-blooded animal.

Afterwards I asked what could the astronauts do. The students suggested using lime water to remove CO_2. Then they asked me what else could be used. I suggested that we used barium hydroxide and potassium hydroxide with plants. I asked that they check physiology books for further references.

To measure the CO_2 produced, the BSCS explained that by knowing the concentration and amount of sodium hydroxide needed to cause the colorless solution to become red again, one could determine the amount of CO_2 produced.

APPLIED MATHEMATICS AND THE COMPUTER

Burtis B. Robinson
Physical Science
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During the spring of the 1968-69 school year some members of the faculty in physical sciences from the 13-colleges, the CRG program associate, invited guests from other universities and industrial technical personnel met at Alabama A. & M. College to discuss the possibility of making the time sharing (G.E.) and other computing systems an integral part of our course. This seemed to be a very sound move in that some of us had already involved our students along with the mathematics teachers at the schools. The time-sharing system was already being used at Bishop College, therefore, I attended the sessions and was in favor of full support to build units and/or materials to support the course we hoped to build in the summer at our writing conference.

During the summer conference, we had some very interesting and flavorful sessions. Within the eight weeks we were able to develop our topics to a point that they could be very easily supported or shared in part, for data reduction, or aided instructions for logic and measurements using the computer.

This year at Bishop College we have, I think, used the computer very successfully in many ways, even though the measurement of our success is not so obvious. Students in this course are exposed to the computer hardware early in the school year and given basic information as to how to get on and off the computer using "BASIC" computer language. This information is presented first in the mathematics course then followed up as needed by myself.

In order to help the student become more at ease at the console and do more than marvel at the working mechanics of computer novelty, I am still offering the optional 1 hour/week of applied mathematics workshop and sliderule computations where opportunity presents itself readily. This has proven to be of great help this year in allowing more students to want to quantitate their experimental data as well as to talk about what seems to be happening.

Always keeping in mind that we are trying to reach specific objectives in behavioral patterns, a close watch was kept to see if students were able to choose or state a clearly defined problem if a written list of problems or activities were available. The task required is associated, in part, with the ability of the student to solve problems, and yet gives far more direction than does the statement, "students do learn the processes involved in problem solving." Of course, there are many other aspects involved in solving experimental problems, but these can be and are described in terms of observable student out comes are most likely to become operational only in the classroom.

The success of the computer as a tool in our course can best be attributed to its direct access and availability to both students and teacher. The outcomes of useable materials could not have been nearly as successful without having had the hardware and funds to be used exclusively by the physical sciences, along with the unselfish and willing help of the mathematics faculty.

Listed below are some of the kinds of activities attempted this year with the computer.

FILE NAME	DESCRIPTION	PROGRAMMER
CNVT	A working program for conversions of basic units for the scientist.	Jesse W. James Bishop College Mod. TCCP-Physical
SPHT	To solve problems (reduction of data) combining basic equations for specific heat. Change of state.	B. B. Robinson & Daisy Penn (student)
ROOTS	Methods of finding the nth root of numbers, used in the applied math sessions.	The Class
SLOPE	Determining the slope of a straight line at a point (X_1, Y_1).	Robinson & Selected Students
BAL	Balancing chemical equations or making compounds used in the chemical behavior of matter.	McAvoy, et., al. (CRG)
WAVES	Reduction of data to determine the wave length by doubleslits diffraction.	Gracie George TCCP-Talledega
LAW 1	Boyle's Law - A reduction of data for experiments attempted in the Kinetic Molecular Theory.	Robinson
LAW 2	The Linear expansion of gases dependent upon temperature (Kinetic Theory).	G. E. Library Service
LAW 3	Charles' Law - A program that will handle the data obtained by experimentation in satisfying the Kinetic Molecular Theory.	Robinson with some alternations by G. E. Library Service

PENDULUM	Reduces data to determine the period of a pendulum used in Applied Math. Sections to make predictions, and the laboratory to study motion and influences of forces.	Robinson
COULAW	Used to aid in solving problems in basic units of electrostatics (special) group report with selected students.	Robinson & Group Students

The preceeding activities represent only a partial listing and description of all activities attempted over the past year, students were constantly involved, not 100%, but a majority was attempting all sorts of programs as time permitted.

It is hoped that during the next school term, (we all being a bit more "literate" toward ways to use the capacity of our mathematics and tools of mathematics), shall develop and attempt to use more effectively; the digital as well as the Analog Computer System that we hope to acquire in the near future.

To this end, a proposal has been written and is in review by the U.S. Office of Education Regional Project Section, to support our efforts in the use of Applied Mathematics and Computers in the Thirteen College Natural Science course with support of the departments of Physics, Chemistry, and Biology.

FROM CREATION MYTHS TO THEATER OF THE ABSURD

B. Dilla Buckner
Humanities
Jackson State College

I. Mimeographed Materials Used in Unit on Mythology

1. Birth of Buddha (Indian)
2. Birth of Manabozho (North American Indian)
3. Birth of Rama
4. Birth of Vainomoinen (Finnish)
5. Death of Buddha
6. Death As Punishment (African) 3 versions
7. Children of the Knee (African)
8. The Wrong Choice (African)
9. Journey of Nanna to Nippur
10. The Adventures of Mrile
11. Izanagi's Descent to the Lower Region
12. The Dog's Wisdom
13. Inanna's Journey to the Netherworld
14. John Henry...in West Virginia
15. The Spider Pays His Debts - 2 versions
16. The Left Over Eye
17. The Two Strangers

Excerpts from Myths of Greeks and Romans
concerning Birth of Venus-Aphrodite
Birth of Minerva-Athena
Journey of Orpheus in Search of Eurydice

Excerpts from American Negro Folktales
concerning Ghost and horror stories
Withcraft and voodoo stories
Animal Stories

Myths of the Greeks and Romans served as good source material.

Aeschylus - The Orestian Trilogy; Prometheus Bound
Tutuola - Palm Wine Drinkard

Audio-Visual materials used during this unit include
1. Slides of African sculpture and paintings.
2. Slides of Ancient Greek and Early Christian Eras
   Greek (Parthenon, certain gods, etc.)
   Christian (early journeys, crucifixion, birth)
3. A recording of Eartha Kitt reading African Folktales

II. Materials used in the Unit on Protest:

Protest tales from American Negro Folktales
Black Voices

Rise of Silas Lapham
Uncle Tom's Children
Othello
Hamlet

Mimeographed copies of:

1. Declaration of Independence
2. Justice Demands It
3. Emancipation Proclamation
4. Voices of Oppressed Men
5. "The First Militant Minister" from Black Fire

Audio-visual materials used in Protest Unit:

1. Transparencies of Political Cartoons
2. Recording of Great American Speeches
3. Recording of Othello
4. Recording of Hamlet - certain scenes selected by students
5. Recording of black protest songs
6. Driskel slides of paintings by Black Artists.

III. Materials Used in the Absurd Unit

Ionesco's The Lesson
Ionesco's Jack or The Submission
Genet's The Blacks
Gelber's The Connection
Camus' "Myth of Sisyphus"
Ferlinghetti's Coney Island of the Mind

Audio-visual materials Used in the Absurd Unit

1. Recording of Lysistrata
2. Slides of abstract paintings - representative works of Picasso, Ernst, Duchamp, Chagall, Tobey, etc.
3. Recording of some jazz artists who could fall under the heading of absurdists, e.g., John Coltrane, Roland Kirk.
4. Film of The Lesson

Equipment used in the units include:

1. IBM Dictaphone equipment
2. Tape recorder
3. Overhead projector and transparencies
4. Record Player
5. Carousel slide projector

Some cultural events attended:

Mahalia Jackson Concert
Leontyne Price Concert
Eugene Holmes Concert
Nutcracker Suite
Jackson Symphony Orchestra
Judge William Hastie (Lecture)
New Orleans Symphony Orchestra

Local Jazz Groups in Concert
Bobby Bryant (Jazz Artist)

The first quarter was very similar to the beginning quarter last year in terms of materials used. As before, the myth unit proved to be a good one with which to start, partly because a number of the myths represent some of the first forms of literature in many cultures. Another reason the myths are a good starting point is the length (most of them are short), and the lightness with which they can be read--although they may be about serious topics such as birth, death, creation, etc.

As whenever I have taught the myths, the students have to first rid themselves of the idea that the myths are mere fairy-tale - like stories. Although some of them are meant to entertain, a number of the myths derive from actual beliefs and customs of some cultures which had no scientific explanations of certain phenomena of nature, man or his creation.

I followed the same format as before by beginning with birth and creation (of man and the world) to the hero, and concluding with death and journey myths. The birth myths that were used were Manabozho, Rama, Buddha and Vainomoinen. Each of these birth occurred as a result of some type of supernatural happening or the mingling of something earthly with some supreme being or force of nature. An example of this would be Manabozo who is conceived as a result of a strong wind or Buddha who is really the son of the God of Tushita heaven. As a result of these births seeming totally impossible to the students, we explored the birth of Jesus Christ for comparison. This led us into a discussion of the possibility of some mythology in the Bible. The students noticed, for example, the close similarity between the birth of Buddha and that of Jesus Christ.

To further demonstrate to the students how some myths still exist, I assigned the collection of birth myths, stories, superstitions that are still in existence. This assignment was not as extensive as the final one which will be discussed later. Here the class only talked to fellow students in the dormitories and found out some of the beliefs they had or stories they had heard concerning conception and birth. They discovered students of their generation who still believed in a person's being able to "mark" an unborn child or predict an unborn's sex dependent upon the side on which the mother lies. They were very surprised at their findings to see that there were people who did believe in certain taboos of birth despite many scientific discoveries proving otherwise. This assignment further helped the students to appreciate the myths better as a form of literature as well as a partial history of some cultures.

Following the assignment on birth myths, we discussed the hero myths which included "The Spider Pays His Debt" (2 versions) and "John Henry and the Machine in West Virginia." Preceding this discussion, however, the class set up certain traits of a hero by which a person could be tried. This they did by discussing what had contributed to the making of modern heroes like Martin Luther King, Robert and John Kennedy, Malcolm X, etc. After the students began to challenge each other about who was or was not a hero, they finally concluded that a person who's a hero to one need not be another's hero. They did, however, agree upon a few people. This being established, we went into the discussion of the above-mentioned myths and talked about what made these characters heroic. In addition to this, I gave the studetns some traits of the traditional hero taken from A Study of Folklore. According to these characteristics, Moses, Elijah, Joseph and even Jesus fit into the hero category. The method by which the hero dies led us into the discussion of the death and journey myths.

Basing their ideas on the "stuff" that most myths are made of, e.g. imagination, exaggeration, the students composed their own death myths before I passed out the mimeographed ones. Many of theirs had the same basic philosophy as the printed ones--that death came about in a number of instances as a form of punishment because of some disobedience. The students were quite interested, for example, at the similarities between their original myths and "Death As Punishment," especially since all they had to go on was their knowledge gained from the reading of earlier myths and the simple question: How do you think that death came about?

The death myths led us into the journey myths quite naturally, since a number of the students believe in another life after death. This accounts for their discussing the upper world journeys in terms of a heaven and the lower world journeys of hell. The equation was easily made because in "The Journey of Nanna to Nippur" (upper world journey), Nippur is described as a land of riches. The same idea holds true with "The Girl Enticed to the Sky" (Upper world journey) because she, too, is granted her wishes there. Contrastingly, nothing good happens during the lower world journeys which were plagued with demons; this, to the students, was comparable to hell. I believe that the journeys were made more interesting to the students because of this analogy. Another factors contributing to the effectiveness of this section was the comparison of the possible journeys of Lazarus and Christ and their supposed return to life. All the other journeys, too, were complete cycles.

In the section on journey myths this year, I used only one myth which I din't use last year. I chose to use "The Adventures of Mrile" because 1) this particular unit lacked black materials and 2) because although it is a journey myth, it contains several revealing factors about the African culture and mythological beliefs. This myth further served as a good connecting device for bringing in other African tales that were not necessarily related to birth, death, or journey. The Dilemma stories fall into this category. The two I used were "The Two Strangers" and "The Left-over Eye." Because these stories leave the endings up to the reader, they make for very interesting debates and quite often very heated arguments (all to make up an exciting class period). A technique that worked very well with these tales involved dividing the class into sections with each defending the particular outcome that he firmly believed in. About mid-class period, I had them to completely reverse their stand, choose the other groups' endings and tear down their earlier contentions. In this way, I was hoping that they would look at the tales from several angles and still see that one possible conclusion could be equally as justifiable as another. It worked!

The AFrican tales as a whole were particularly interesting to the students perhaps because for the most part they readily read anything Black and because some of the students had either heard or read similar tales before. The male students enjoyed discussing the death myths because they revealed that in several cases the African writers showed that death came about either as a result of woman's disobedience or curiosity. Immediately, this put the female students on the defensive and made for an exciting class period.

The shorter African tales led quite smoothly into Amos Tutuola's Palm Wine Drinkard. This is another work that I had not used before unfortunately.

I say unfortunately because I don't see how I missed it and thought I did such a good job with mythology last year. My students and I found that this book contained just about every category of mythology that we had discussed separately. It contains a birth myth--the son is born from the thumb; a death myth--death comes to the world as a result of a deal and has to stay here because He can't find his way back home; journey--the whole book is about a cyclic journey. In addition to this, the students found dilemma and trickster tales. This section of the mythological unit was quite successful. The only criticism that the students had about the book was that it tends to go into too much detail about the main characters' many encounters. They felt that the same achievements could have been made with fewer adventures. Great critics, some of them.

Since the Palm Wine Drinkard was at the end of the section on African mythology, I concluded by showing slides of African paintings and sculpture. The students were particularly interested in the masks and shields and this led to a discussion of possible rituals, etc, for which they may have been used. Some of the slides further revealed much about the African culture, taboos, beliefs.

From Africa, we went to Greece with much less enthusiasm on the students' part. The Greek mythology was not studied categorically as we had done the other works. If the categories were obvious, the students would mention them, otherwise we simply studies the work as a piece of literature probably because it was much more difficult for the students to read and understand. The works that we did were The Orestian Trilogy and Prometheus Bound. Once they got through the interrelationships of the gods, goddesses and mortals, the students found that the stories were basically simple. They did admit, however, that only after the class discussion and their finding out the relevance of some of the characters did they understand the plays, especially Prometheus Bound. The one facet about the Trilogy that they discussed at great length was the Greeks' sense of justice and fairness of vengeance. This discussion came about as a result of their saying that the plays were mere stories of endless and meaningless murders.

After showing the class slides of Greek architecture (Parthenon, etc.), sculpture--emphasizing the Greeks' ideas of perfection in human figures especially, and paintings of various gods, I concluded the mythology unit with Prometheus Bound. This particular play served as a very good link between mythology and protest because it contains, very obviously, both. In fact, Prometheus can be referred to as the mythical rebel.

Follow-Ups

The final project for the first quarter was like the one done by the students last year for two very simple reasons: 1) It worked well once, and I wanted to see if it would be equally as effective and 2) the students seemingly enjoyed doing the collection as opposed to writing a research paper. (Who wouldn't).

They had a choice of two adventures: 1) They could find several (at least three) versions of one myth or myth type and compare them, noting changes, similarities, differences. An example would be the student who chose to compare four versions of John Henry or Paul Bunyan and to show the variations among them. In another case a student selected several creation myths (either of man or the world) for comparison. 2) The other alternative was the collection of ghost tales, witch tales and other folklore that might account for modern mythology (superstitions, rituals, customs, cures). This project was a bit more involved than the above-metnioned one. I gave the assignment before the students went home for Thanksgiving because I wanted the information to come from the older generation rather than fellow students. Each student who chose this project formulated his own questionnaire, and they were asked to collect materials of only one category. Unfortunately they could not have tape recorders, so they wrote down as nearly as possible exactly what the interviewee said. The questions and answers (ghost tales, cures) became the students' appendix of the paper. The body of the paper consisted of the conclusions that the interviewer reached, in terms of common elements, variations, etc.

Another follow-up has been previously mentioned in which the students wrote original death myths before receiving the mimeographed ones. Still another follow-up involved the students in a discussion of ghostlore, witch tales and voodooism. An ex-student, who incidentally firmly believes in all three, volunteered to talk to my classes on these. He was always a very shy student, never a good discusser in class, so I was really taking a chance. Once he was in full command of the class, he was quite relaxed and the students enjoyed him tremendously. He was unable to come to visit my second class the next day and "the word had spread" about how interesting he had been. That class was quite disappointed.

We started the protest unit the second quarter. I began with a combination of protest tales from American Negro Folktales and "Ethics of Jim Crow" introduction to Uncle Tom's Children. When I first assigned the protest tales to the students, they read them and considered them as jokes. Then I, without extensive comment, assigned "The Ethics of Jim Crow" by Wright. The next day the jokes were not quite so funny because they discovered that according to Wright's account of actual experiences a number of those "jokes" were true facts. On that note, we discussed the seriousness of the themes along with the satirical manner in which they were presented. The tales proved to be an excellent introductory device because they were light and easily read, but still got over a good point. The students, at this point, had to commend the Black man's being able to laugh at some of the things that had happened to him that really were not humorous at all. We concluded that a little humour probably helped him to endure some of his otherwise unbearable ordeals. Following the above lead-in to protest, we began discussing the stories in panels of 4-5 per group. Afterwards, they could either question the other members of the class or vice versa. Some good debating sessions came out of this kind of discussion. I merely refereed when necessary. Since we had talked about the stories as separate entities, the follow-up quiz was an essay intended to bring out a common theme that could possibly hold the stories together. The results were quite gratifying because the students brought out many ideas and possibilities that I had not thought about but that were very logical. They also brought up themes that were not found in all the stories, but in at least three, such as religion, communism, interference of nature. This particular book and Black Voices were perhaps the best received and discussed books in this unit. The point that is really interesting is that I used neither of these books last year. Neither did I use these books in succession, so I'll discuss the latter one in another section. The only other point that I'd like to mention is that even though Uncle Tom's Children is in the protest unit, there is no pronounced protest as we had discussed before in the stories. One particular example is that a number of the characters protest against their harsh treatment by sacrificing their lives rather than letting the whites take away the basic principles of life that meant so much to them.

After we finished Uncle Tom's Children, we focussed on political as well as social protest, and began with "The Declaration of Independence." We first established certain criteria about the protestor, i.e. his reasons for protesting, methodology, outcomes. In addition, we discussed the different kinds of protest--anti-regulations and rules, anti-religion, anti-society, anti-self--in an effort to do a reversal of going from specific to general categories. It is difficult to evaluate a student's response to such a document because very little can be done to excite him about such a work. Why then did I give the assignment? The answer is simply because I wanted to expose them to some other kinds of protest other than the daily newspaper kind--Black, Vietnam, college. The one idea that was particularly interesting to them in this work was that America wanted to enslave but not be enslaved. This is the same kind of discussion that came about during my playing the record Great American Speeches in which they listened to representatives from Patrick Henry to Abraham Lincoln. They discussed the speeches not only in terms of content, but methods used in delivery. Based on a critic's description of Abraham Lincoln's delivery, for example, they talked about how effective Carl Sandburg's reading of Lincoln's speech was. Too, they discussed the length of his speech in comparison to others--he had reached in a few words what others may have failed to do in a much longer speech.

The section of the unit which included "Voices of Oppressed Men" was interesting to me, so I tried it with the students. As the unit suggested, I passed out the excerpts from some speeches, novels, etc. with the names and titles omitted. We discussed the content of each, talked about the reasons for protest and techniques of persuasion and attempted to describe the kind of person that would use various approaches (violent - non-violent). Since the first excerpt was from Martin Luther King's "Letter from a Birmingham Jail," the students assumed that the others were about Black protest--some were--and they proceeded to tell me how the excerpt from Rousseau's Social Contract was about a black protest and by a Black protestor. Only after their discussion did I reveal the author and work. The technique worked very well, and that particular example that I gave served to show them that the Blacks weren't the only people who could be enslaved and protest against it.

A follow-up that I used after discussing the above mentioned documents was the political cartoons from the protest unit. This particular follow-up left me with mixed emotions because as a teacher I felt badly because I couldn't explain why the cartoons were interpreted so beautifully in one class and in another class they were just "blah." The first class was, on the whole, aware of the satire that was used while the latter seemed as if they could care less. Some of them stated that they had not even taken notice of similar cartoons in the newspapers. I've consoled myself by attributing that failure to their background, and I hope that at least the exposure to the cartoons revealed this as another method of protest. The irony is that, in a sense, the class protested against my using those cartoons that day.

The students did not particularly like reading Howell's Rise of Silas Lapham because "it was too long and too dull" to quote them. Although I am very much aware of the fact that it is not the most interesting book in the world, I used it because it did provide exposure to several other kinds of protest--society, self, business. An accomplishment which I attained but didn't aspire for was that the students became aware that not all reading is exciting, but it might contain something applicable to their experiences. Tentatively, if I focus on the protest unit next year, I plan to find another novel that might be more interesting to the students and at the same time contain similar examples of protest.

I regained the students' interests with the essays, biographies, and literary criticisms from Black Vocies. Although I felt that some of the material would be as difficult as Rise of Silas Lapham, the students were more responsive to this information because of the mere fact that it was concerned with Blackness. The only essay that they complained about was Alain Locke's "New Negro," and that, after class discussion, they claimed to have immediately understood. The works ranged from Frederick Douglass to DuBois to Ellison, and many, though excerpts, were descriptions of people, events and experiences to which the students could relate. The discussions were flexible enough for the class to cite personal experiences that were similar to the ones we mentioned. The students especially enjoyed what Locke had to say about the Negro's contributions to America and they were a bit appalled at the fact that jazz did not belong solely to the Black man. A follow-up question on this point involved a comparison of Locke's theory on music to that of DuBois from Souls of Black Folks. Results were very gratifying and the students' analyses were very well done. Equally as interesting were the answers to the question: What are the different connotations of light that are revealed in Ralph Ellison's "Prologue" to Invisible Man? The students justified some symbolism that I had not thought about, and this was encouraging because it demonstrated that they were able to look beyond the printed page into other possible meanings suggested by the authors.

We did not finish the protest unit in its entirety this quarter, and there remained one last section on poetry to complete. Hence it was carried over into the final quarter's work. Results are discussed in the work described in the third quarter.

Second Quarter Follow-up

The project for the protest unit was again very similar to the one done last year. Based on the information that they had stored from works and discussions on protest, the students compiled articles from newspapers and magazines on one kind of protest that they chose to discuss. They were to select either campus demonstrations, anti-Vietnam marches, civil rights upheavals, company and union strikes or any type of protest--as long as they decided on only one kind. The articles became the appendix. The body of the paper--three to five pages--was concerned with the common elements that the different demonstrations had. These clippings were to be compared in terms of the protestor, reasons and methonds of protesting, and either outcomes or hoped-for results. As previously stated the criteria for discussing this information had been set forth during the quarter which had been designated for this purpose. For the most part, the papers were fairly successful; they did, however, positively reflect that the students had worked diligently and had done some very impressive jobs of analyzing the works collected. Some had done very good papers with not-so-good collections; while others had been designated for this purpose. For the most part, the papers were fairly successful; they did, however, positively reflect that the students had worked diligently and had done some very impressive jobs of analyzing the works collected. Some had done very good papers with not-so-good collections; while others had excellent articles, but had done a poor job on the comparisons. Since they were being graded on the over-all paper and appendix, in many cases this made for a good balance. There were more students, though, that had good papers and good collections.

Since we did not finish the unit on protest the second quarter, we began with it for the third quarter, continuing with the poetry in Black Voices. Although we were still involved with man as protestor, I assigned poems on many different themes and concluded with protest poetry. My goal was to expose the students to as many poems as possible by Black authors about non-Black topics. My rationale behind this approach was based on a reaction that I had observed with the student: they - the majority - felt that Black poets wrote about enslavement, prejudice, etc., and very little else. Hence, I gave them poems on any theme other than the one that they expected. I selected poetry on love, life, death, religion or any other type indicative of just being a poet and having nothing to do with Blackness. By explaining to them what I was doing and exposing them to such a variety, I was able to get them to look more at "the poem" for its merit rather than at its Black composer. Their reactions varied from poem to poem, but this technique did aid in their being able to better analyze each poem as an entity. It also helped the students be more objective when we read and discussed a good cross-section of poetry in Kenseth's Poems of Protest-Old and New

Oral readings served as a good device to maintain student interest and reading-in-advance because they did not want to be caught off-guard or caught not having read the assignment for a class presentation. I make this statement because I believe that more interesting work has to be devised along with many new methods of teaching during the last quarter, because by then the students and teachers tend to lose interest and grow tired for many reasons. Among them are the weather, repetitions of kinds of works, and just plain being tired of school, reading, and work for a while. Thus, the spring quarter should be a time when the instructor pulls all kinds of techniques out of her hat that will maintain interest as well as inform the students. A teacher's most difficult job (mine was) is trying to get a student to read the assigned materials. I merely mentioned the handicaps under which I was working to better explain some of the things that I did.

There was no specifically different approach used with the other collection of poetry, but becuase of the treatment of Black poetry I found that I had alleviated some anticipated problems. One such example was with "Man With the Hoe" by Edwin Markham. Only a few students said that the person described had to be Black because of the troubles that the narrator described. Since I have to remind myself that this is a Humanities course, that particular poem due to its vivid descriptions led to my assigning to the students a follow-up to "Man With the Hoe." They were to draw, based on the description set forth by Markham, a picture of how this man looked to them. I realized that not all students could draw and encouraged them to do their best according to their interpretations of the poem. I placed all of the pictures on the classroom bulletin board whether good, bad, or indifferent. Most of them had at least some point that related how the student believed that man looked.

Another successful assignment culminated the poetry section. Without discussing the play entitled "The First Militant Minister" by Ben Caldwell, I assigned it for reading. In addition, the class was to compare it with any two poems of their choice from Black Voices or Poems of Protest - Old and New. They did a very good job and came up with protests against religion, Uncle Toms, society and many more.

We discussed Othello and Hamlet in succession and both from several angles. I used the question-answer method, panel discussions on certain themes, i.e. revenge, jealousy, love, and character descriptions. We also discussed the critical essays that appeared in the Signet editions of those plays. This time I assigned all of the students certain essays to avoid dividing them into groups and having some less interested students not reading them. After we finished discussing the plays and essays, I asked the class to decide on certain scenes from the plays that they wanted to hear on records. It was very interesting that most of them chose the same scenes. After listening to the record, we discussed the characters portrayed on record in comparison to the ideas that the students had formulated from reading. Many commented that the actors had not sounded like the ones they had pictured. The women, too, were main topics of discussions in both plays, especially as for as morals were concerned in Othello. The class concluded that some of the voices (actors) should have been switched, and in actuality, only Iago's voice met their expectations.

Before beginning the theater of the absurd, I gave the students some background information on this theory. I began by trying to erase a preconceived idea held by the students that absurd simply meant ridiculous. After establishing with them a working definition of the absurd and giving them characteristics of this kind of writing, I assigned Ionesco's The Lesson. Although I thought I'd given them enough information, they still thought this play was a bit too much "out of sorts" and they claimed that nobody like the professor could even be imagined. In discussing his personality, they used words like "sadist" and "masochist." So, from the morning paper, I read them an article that I felt contained some present day absurdities. This contained a reporter's story of Speck's (the Chicago Killer - 8 nurses) having on his cell door pin-up pictures of the eight nurses that he had murdered. The professor, which they then compared to Speck, no longer seemed to be a nonexistent figure.

I showed slides of abstract paintings before assigning another play, and we talked about the possibility of their being in the absurd tradition although this theory is usually limited to the theater. I gave them representative works by DeKooning, Chagall, Tobey, Ernst and focused on a number of paintings by Picasso. I had intended to play Contrane's Ascension at the same time, because I believed that this would create an absurd experience for them, but I had a problem with the record player. Their interpretations of the paintings did reveal, however, that they had begun to formulate in their minds another definition of "The Absurd." This being accomplished, I returned to the literature, and culminated this section with The Blacks and The Connection which I can not comment on because they are now being discussed.

Follow-up - Absurd

The students were asked to do an original work - painting, sculpture, play, short story, or poetry - that was in line with the idea of the absurd. This was the appendix. In addition, they were to write a short paper explaining why they felt that their creations were absurd. They could make use of any characteristics of the absurd that they read or that had been discussed.

In conclusion, it should be obvious that I again used the stances as a base for setting up my Humanities Course, and again they worked very well. This year, however, I was guilty of being a bit overly ambitious because I found that I either had too much material or my students didn't accomplish as much as quickly as I had anticipated.

FORMS OF STUDENT RESPONSIBILITY

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[This material has been excerpted from a longer report, Editor.]

A Unit on Religion

Throughout the epistemology unit, it became obvious to us that the students were very much interested in religious problems and issues. For instance, in discussing Descartes' "First Meditation," the students' interest was aroused in a discussion concerning the possibility of an evil, all-powerful demon and within minutes we were into a full discussion of the problem of evil. However, we also found that explicit mention of God, or demons or hell etc. were not the only things that motivate the students to discuss religious topics. In fact, almost all discussions of what we take to be philosophical problems were understood and analyzed in terms of categories the students had assembled from their religious backgrounds. In our discussion of prejudice, the students thought you could hate someone's actions, but not the person. When asked why they thought this they responded that they had learned it in church. Note, we do not think this is bad, something that must be overcome. Rather we just consider it a fact about the concerns and interests of our students. In fact, we could anticipate such reactions and introduce these considerations into our discussions. The best illustration of the three theories of truth which worked was a question I asked them: How would you establish the truth of the statement "God exists" for each of the three theories? They quickly answered the question and discussed it at length which I don't think they would have been able to do if I had given them a scientific statement or theory. Taking all this into consideration, we knew that any attempt to raise both political and ethical questions would again bring up religious topics. We feared that a discussion of justice, freedom, equality, abortion, free love, censorship etc. would raise complicated discussions of religious issues and would endanger our attempt to be clear and critical about both kinds of problems. Hence, we thought that if we took these issues separately, we could better fulfill our aim and at the same time satisfy and enlarge our students' interest.

Finally, some of our students are going through what might be called a religious crisis which is very concrete and personal with them. The times and other students force them to question their own religious background. Even if we ignored religious questions altogether, we would still be adding to this questioning. If we attempt to engage the students in critical thinking about all kinds of things, we are leading them away from a life style of authority and outside discipline, in short, of being told [illegible] to do and when to do it, what to think and when to think it. As a resu [illegible] are helping to create a vacuum which our religious unit hopes to fill. [illegible] do not open up critical discussion of a primary area of our students life, then we have failed to be relevant and if we are implicitly dealing with a life style that we are affecting and yet fail to discuss it we are being neglectful.

There are some criticisms of doing a religious unit. Some instructors have indicated that they are reluctant to delve into the private areas of their students' lives. This to me is not being relevant. That's like doing Plato and skipping over the section on marriage and sex because the students will have to speak to personal questions. Akin to this is the criticism that we are not out to shake or change the personal beliefs of our students. But it is true that we are supposed to widen and deepen the students' insight into their private beliefs and encourage them to be critical concerning them. If they do happen to change their beliefs, it is a result of their own investigation and analysis. This is good and one of the primary aims of education. Anyone who thinks that a religious unit or any other unit has to be indoctrination does not understand the TCCP program.

Finally, there is a criticism that I think is real but not unique to a discussion of religion. It is true that some students create or encounter an emotional blockage in discussing religious problems. What is meant here is not necessarily that some students tune-off what is happening. All the students are quick to discuss their views and defend them. (Yes, there are some students who are neither anxious or quick to discuss their views [if they have any], but this is what is good about the religion unit. Everyone has a view and even in the case of our silent minority, everyone talks about religion. I had students whose silence ended during this unit and they have continued to express themselves in class. I still have 2 out of 35 who are silent, but their other work indicates that they are not disinterested.) Rather they tend to label some points of view as atheist or immoral, or the work of Satan and they refuse to seriously consider them, thus curtailing the critical process. For example, I gave an assignment to the students which was an exercise in comparing different texts and different kinds of evidence. They were asked to compare an Akkadian Myth, Genesis and a scientific statement of the origin of the universe. Some students never got around to the comparison. They just said that they were taught that Genesis was the truth and some went on to justify their belief in God's creation. It was not that they couldn't have done the assignment for some students did it, and they weren't the best students either. It was simply that they didn't want to get into forbidden territory. But, some of the students hold views that resemble what the other students think result from the work of Satan, and through the interchange, all students are benefited. It is as if once some students see and listen to other students who are filled with Satan, they begin to see his standpoint as legitimate and as a result, they take a good look at it and are forced into formulating an answer to his or her objection.

This emotional blockage sometimes takes on another form than just merely a failure to face the issues. It sometimes appears in what might be termed intellectual escapism. The students will discuss issues in a purely abstract and objective manner. The more abstract the discussion is, the more secure they are. I had a student who wrote a paper on Freud and Feuerback and who understood what they were saying. However, his paper did not discuss his own reactions to these authors. Knowing that he was a strong Baptist, I asked him if what he had read influenced his own particular beliefs and he seemed to indicate that they didn't. Nowhere in the paper was there a critical approach that would justify this no. Clearly he tuned-off and retreated into a secure objective world where his personal beliefs remained unchallenged. The aim of making the problem a personal one and hence a critical one was clearly unfulfilled. But I am rather certain that this failure is not only a result of the religious nature of the topic. When the students discuss a new topic on their own, they do it on an objective, theoretical level that has nothing to do with their own personal life. For instance, when I asked the students what freedom meant to them, they gave me Mill's normative statement (never before mentioned in my class); you can do what you want to do as long as you don't harm anyone else. The class discussion continued with the students trying to figure out examples of actions which people thought were justifiable but which could not be done if this statement was followed. Some of us might be pleased that the students were able to argue in this fashion, but for many it is an academic game carried on in the class or on an assignment and subsequently forgotten. No one used this principle to actually criticize the lack of freedom they experienced every day. During the next class period, I asked them if they were free to say or do what they wanted or thought right, even if it didn't harm others and the discussion continued relating their experience to the principle. Some might say the first thing to do is to find out whether the principle is valid, but it seems to me that the first thing to do is to find out what freedom means to each of us every day, describe that as a fact and then begin to be normative when insufficiencies arise. There are two ways to be critical and I think that all of us sometimes stress the former over the latter. It would be much easier for me to engage the students in an objective philosophical discussion of accumulating counter examples to a statement which was for the most part unrelated to their own experience, than to direct them to relating the discussion to their own personal life by asking them directed questions. I suspect that this is a consequence of the whole attempt of divorcing education from life which results, consciously or unconsciously, from our traditional educational techniques. We are sometimes so interested in getting the students to know what somebody said or to critically deal with what he said that this becomes the students' whole concern. The same split can be obtained in an attempt to get the students to be objective. This is a global problem which is not unique to religious topics and should be faced by any curriculum or any unit in that curriculum.

An Approach Through Independent Research

We spent about three weeks discussing religious topics in class and then we suspended classes and devoted a month to tutorial sessions in which the students pursued their own particular interests. The classroom sessions were oriented towards raising problems and presenting perspectives which the students might not have been familiar with.

1. Why?

One of the essential aims of the TCCP is to engage the students in an investigation for which he himself becomes responsible. We as instructors are responsible for an open situation in which the students themselves actually do philosophy rather than just learn what philosophers have said. Independent research is a perfect way of accomplishing both of these goals. The student himself develops a problem (not a topic) and takes an individual stand towards solving it. Reading materials are offered to the student only to reinforce and enlarge his own progress, development and ideas. Criticisms of his position ideally should be offered only when he himself has foreseen them. In this way, the world of philosophical literature is seen by the student as an aid to his personal investigation. In short, the student will be engaged in the literature rather than exposed to it. Hopefully, the student will see the author, not as some brilliant person living long ago, but as someone like himself, engaged in the process of resolving a problem, sometimes well and sometimes badly. Likewise, the student will see himself not as a rather dull person trying to understand some genius, but as an inquirer himself with some inadequacies like everyone else. In this way the student might come to appreciate his own work, the work of the authors and thus the relationship might continue beyond the classroom and beyond the sophomore year.

2. How?

We met with the students for about a half-hour to 45 minutes each week for four weeks. You might spend less time at the beginning, but we feel that anything less than an average of one-half hour would sacrifice the attainment of the goals we discussed above. Each of us spent about 25 hours in discussion with students a week. A lot of the research work we had to do could be done in those hours, but some would spill over and could be done at night. It is good to be both flexible and rigid in designating appointments. Everyone should have to sign an appointment sheet at the beginning and acknowledge their commitment. Also, if they miss the first session for some reason, they know that the instructor will be waiting for them at a particular time the following week. This is extremely helpful if there happens to be a student strike during the first week of the independent research. However, once the students actually get into a problem, a more leisurely atmosphere develops. Students have minor problems they stop to discuss, or they want to accelerate the process and come back to see you in a day or so. Others just spontaneously drop in when they have written something they wanted you to read. Others just come in and want to talk about their papers or about anything that is on their mind. At the end of the four weeks, only two of my students were still coming in at the regular appointed times. Gradually, our students began to know us better and we became more familiar with them. They found that we too were not standing back with the answers, but were searching human beings; not just sitting judging their work but searching with them.

You should be flexible in other ways as well. We would exchange students according to our own interests and abilities. We would join each other in discussing things with each other's students and when other students came in they too would get into the discussion. After a while two groups emerged who would come together and discuss their work concerning the same issue.

3. What?

It is good to be flexible in what the students read, do and present as a finished product. Sometimes we think that critical thinking can only be externalized in clear arguments on a piece of paper. This is false. I had one student who analyzed and evaluated the relationship between Buddhism and Christianity by showing and discussing various forms of art. Her own evaluation of the art illustrated why she preferred one aspect of Buddhism over Christianity and vice-versa. Others taped interviews to illustrate what a religious experience was and whether or not a drug experience could be so classified. Conclusions were reached from the collected data and from the students' own analysis of them. The problem of definition arose when two students independently carried out interviews with people about Black Power and Christianity. The problem of social perception in this area was illustrated when one student augmented his taped interviews with photographs. Taped interviews were also used to prove certain social and psychological effects of religion. This leads to a rather practical recommendation. Here at Bishop we have equipment at the instructor's disposal; movie projectors, large 7 1/2 inch tape recorders, slide projectors, record players, etc. What we need for this kind of thing are small portable tape recorders or cassettes, and inexpensive cameras which the students could carry around to use to accomplish this kind of task. I brought my small tape recorder in and the second student who came in played around with it and decided that he could use it in his research. In a time when students demand that philosophy should be taken into the streets (and ours did), technology has allowed us to bring the streets back into the classroom.

4. At what time of year?

Some have a legitimate argument when they say that an independent study unit is the natural outcome of the philosophy course. By that time students should have developed a critical style and the necessary tools to go off on their own. However, we found several strong advantages in doing this unit in the middle of the year. Firstly, that is where the religious unit is and that's where pedagogical methods have to be most clearly geared to student interests, needs and beliefs. Secondly, you might want to bring some of the papers back into class for discussion. Thirdly, the students are busy at the end of the year, that's when their other papers are due. Fourthly, if this is the student's own work, he must formulate his own pace. One of my students did a fine creative paper in a week. He devoted the entire week to the paper and every day he came in to talk about it. Another student has turned in three proposals on the same paper, but still he didn't feel that he was going in the right direction. He might be lazy, but I will not assume that because I have felt the same way about some of my past papers and I'm not convinced that I am lazy. In fact most of the students have continued to work on their papers for the entire semester. We gave a tentative grade to the papers as they came in and asked the students to come back in and discuss them with us. We made suggestions, pointed out weaknesses, etc. and asked the students to do some kind of extra work. Where a paper was incoherent, I asked for a detailed outline, where a student had been merely describing something that someone else said, I asked them to write what they thought about that and why. Some of the students saw certain difficulties and were able to discuss and resolve them in an interview. Others gladly did more research to undercut our criticisms. Students who had written on a particular subject and disagreed about it, exchanged papers and wrote criticism. Of course, some did it for 'extra points,' but after a while they got the point. Research and creative activity in general is not a matter of just working a while and writing something down. It is a continuous process of revision, more research, re-writing (or editing), accommodating new insights and other points of view. All of this could not be accomplished at the end of the year.

5. Who should choose the problem?

We gave out a list and breakdown of 10 problems. The list was treated as much as an example of how to outline a problem as it was a list of possible problems that could be done. All of our papers were taken from the list, a large portion,however, were further refined by the students to suit their own interests and ideas. I think that this is not so much an indication of our students' lack of creativeness as an indication of the exhaustivenessof the list. All of the problems attempted by the students fit under some problem heading on the list; hardly half of the students followed the outline as it is on the list. For some students the list served to motivate the imagination; for others it provided a convenient structure for addressing a certain problem.

6. Where to meet your students?

Some instructors with offices might think they have the problem licked, but students want to come and sit around, or look at the books you have around, or talk with other students, or enter into the discussion that is already going on. Some come early to re-read what they have written, others are stopping in to give you things they have written, others are coming in to see if a book they need is back or if there are any more tapes, etc. If your office has room for all this, then you are all set. We decided that we would meet in Martha's apartment; it is big enough for all that confusion. The students thought that this was a good idea for it would enable them to come to know us on a more personal basis. There would be coffee and Martha always has something around to eat. But we ran into problems with Bishop College policy. Consequently, we moved back into a classroom. (We have group offices and the confusion mentioned above could not be tolerated). The room has bookcases, three desks and plenty of chair-desks. The students could stop in before and after class, we had coffee and the place did come to have a non-classroom atmosphere after a while. Another instructor had to change the location of one of her classes which she did. This gave us full-time use of one classroom which probably few institutions can provide.

7. How do you provide reading material?

You can try to anticipate general problems that some students will be interested in: (e.g. immortality, the problem of evil, miracles, etc.). Small collections with good articles work best. Buy two or three and reproduce some copies if you have a run on one particular problem. Rather than have a text for the three week classroom session, we thought that the money would be better spent on three or four copies of some good selections. Bring books from the library. Students will congregate around a lot of books and this will increase the chance the something spontaneous might happen (discussion groups, etc.) However, there are areas that you cannot anticipate. Black power and Christianity was a popular problem and we had only one copy of Coné's Black Power and Black Theology. This summer might be a good time to collect books, if you are planning an independent research unit.

8. How did things work out?

The results of the research were varied. There were some projects that were very discouraging and some quite exhilarating for the teacher.

Those that were disappointing, all were so for the same reason. The student had more or less given a synopsis of their peoples' ideas without really entering into the problem himself. This wasn't always because the student hadn't thought about the problems. It seems that students have an internal category called "research paper" which means to them something like writing down things they had read in books. One girl, for example, had done considerable reading and extended discussion on the problem of evil. But when it came time to write the paper, she divorced herself from all this discussion and wrote an abstruse discussion from Buber. This would seem to indicate the almost total failure of the TCCP system, but it seems that it is just the category of "long paper" is troublesome and it's very tempting for a student to just fall back into his old patterns of behavior. (This might be an indication of what happens with some students when they leave the program in their junior year.) However, when this same girl was encouraged to write what she really felt about the problem of evil, she wrote a fine paper.

In general, those students who submitted papers in which there was no evidence that they had used their critical skills, I refused to grade the papers. The second papers were in general an amazing improvement. The students could write good papers and had thought about the issues, but often they just wrote other peoples' ideas because they sounded good.

There were quite a number of students who wrote excellent papers, who wrestled very hard with problems and came up with answers that were uniquely their own. I will give just one example. It is the paper that impressed me the most. There was a student who was not a particularly good one. In fact, he is nearly at the bottom of the class. His reading ability and conceptual skills are quite low and he is not particularly well-motivated. He decided that he was going to do a paper on comparative religions. In particular comparing Hinduism to Christianity. The first time he came to see me he had a standard comparison from a comparative religion textbook. I explored with him what Christianity meant for him, what he thought the essential beliefs were, and how they affected his life. He told me things the way they were. Then I told him to write an account of Hinduism in the same way as he had done for Christianity as if he were a Hindu -- how would the belief affect his life. Well, he really got into the thing. He was impressed with the concept of reincarnation. He was able to ariculate some of the criticisms he had of Christianity since he had something to contrast with it. In the end, he produced a paper that really compared some of the beliefs of each religion in terms of their psychological and sociological productivity. That isn't how he expressed it, but that's what it was and it was something that he had worked out by himself.

A Unit on Social, Political, and Ethical Philosophy

It seemed to me when beginning the unit that there was one assumption which I knew the students held which would make the creation of a state impossible for them and that was the proposition that happiness is totally an individual matter. I thought that a discussion of the consequences of certain actions and the topic of whether or not some actions are good in themselves might help to question this assumption. In other words, I was trying to get the students into a position where they could see the possibility of making universal laws which would benefit all individuals. But something unexpected and significant happened.

We began talking about individual preferences and immediately a student said that this might be true, but the government doesn't view the situation in this way; their laws bind all individuals regardless of personal preference. If you think smoking pot is good, and you like to do it, just try, and pretty soon you'll be busted. Since most of the class was vehemently against the use of marijuana, we had an interesting discussion which essentially involved the issue of the individual vs. the state. Some students maintained that smoking pot was dangerous for society; What would happen if everyone was stoned, who would do the serious work so vitally needed? What would happen to general health and to the moral stability of society? We discussed the right to individual preference in food and drink vs. the need for public health; freedom of speech vs. the need for a stable society; the right to determine how many children you have vs. the population explosion; the right to fall in love with whomever you like vs. the need for intelligent and talented people and the need for more interracial marriages to break racism in this country; the freedom of individual preference in job selection vs. the social need for certain kinds of professions. What was interesting was that most of the students would have argued in favor of individualism but since the discussion started with marijuana, the students forced each other to be consistent and many had to adhere to a full-blown theory of social manipulation.

Now let's go back and see where I started and where I ended up. I wanted to get the students into a position where they could appreciate the possibility of establishing laws which would benefit all individuals concerned. Instead we ended up discovering that far from being benefited from social and legal norms, the individual and his personal preferences are, in most cases, in direct conflict with them. In other words, I began with the students' common-sense notion of happiness as an individual thing, hoping to come to some conclusion about a generalized notion of happiness on which a society could be based. But the students took their initial view in a different and no less important direction by pointing out and illustrating that personal happiness and social justice are two very different things. They came to grips with a problem that I didn't think we would get to until we had read quite a bit more. We were at the threshold of a real problem facing society and that is whether to orient it towards the good of all or towards the good of the individual. Moreover, we found that you couldn't have both which was a revelation to most of the students. In short, the students were beginning to address and try to solve this problem for themselves. The rest of the semester was an attempt to do just this.

I was convinced that the students were able and should take the responsibility for the development of the issues which we would discuss in class. There were a number of topics we could get into, none of which were necessary for the discussion of the central point we had established. It could be applied to anything from sex to democracy. Thus, I thought we would start from scratch and see what happened. I gave them Chapter VI of Cornford, "The Rudiments of Social Organization," and we were off. If they wanted to discuss whether or not it would have been better to have individuals live outside of society that was all right with me. But neither class did. They accepted the fact that people would come together and develop one talent. The problem they were interested in was how would they exchange their goods.

One class assumed that they would trade them and we tried to figure out what the outcome of such an arrangement would be. Some would be better talented and would be able to get more for their goods. Others would have better, more lucrative trades (the farmers) and they could always trade their goods. Some of the more capitalistic minded students said that the food growers could bring the rest of the economy to their knees and get everyone working for them. This led us to a discussion of the origin of class structures and the emergence of a labor force dependent upon the people owning the land and capital. I gave them some Marx to read which they thought was closer to the truth about what would happen and they wondered why Plato did not discuss this possible development. (They were impressed when they later found out that he did.)

The other class began to get into some of the problems of what they called the "barter society" but they decided that Plato could have been talking about a 'sharing society' where everyone would get what he needed. They took this lead and after a while one student convinced the rest to accept this way of doing things and they followed its implications. Later, they tried to achieve the beneficial results that this economic system offered while at the same time allowing for as much personal freedom as they could. Needless to say they had their problems.

Through the rest of the year I limited myself to the discussion that the class initiated and pursued. If the class came to a dead-end, I would introduce new questions and problems about what they were discussing. I did not offer anything new of my own; for instance, I did not suggest that there was another way of distributing goods to the first class, if it did not come from the students themselves. Also, I did not introduce reading material unless that material was relevant to the discussion they were pursuing, or the problems that discussion raised. We had some duplicated material that could be used when needed which some classes never got to. Obviously I did not demand that the students read Plato chapter by chapter but they did read quite a bit of the Republic because they themselves raised problems which Plato also addressed and his solutions could be helpful either in assimilation or in criticism. Other students wanted other reading materials and they got actively involved in their own investigations, investigations which would enhance the insights of the class.

As you could well imagine this procedure makes this report difficult to write. I cannot just mention some reading materials and evaluate them in terms of their ability to illustrate a certain point to the students. Even if both classes happened to read the same selection, they might be doing so for entirely different reasons, from a different point of view and with different interests.

The Summerhill selections offer a good illustration of this point. One class read Summerhill in an attempt to find some way of educating men and women so that they would not have sexual hang-ups about each other's bodies which would hinder them from serving together in the army. The other class was interested in a way of developing personal freedom through education. As a result of this kind of problem, I have chosen to briefly sketch the route pursued by the first class in order to show the kind of things that can happen when a class is allowed to 'go off on its own.'

As mentioned, this class began to develop a class structure in their society not because they wanted to but because they saw it as a necessary outcome of a barter economy. One sector of the economy got the upper hand and turned the rest of the population into laborers negotiating with them for possible jobs. Because of the nature of particular talents, four distinct labor forces emerged; technicians (Blacksmiths, wagon makers, botanists, accountants, etc.), luxury producers, common laborers and unemployable persons.

The problem of discontent got the discussion into the need for a police force and an army, depending upon whether the discontent was external or internal. The students pointed out that not only the best fighters but the ones that would benefit from joining the army were from the lower classes who in turn were the most discontented of all the social classes. The upper class would not only have to convince the lower class to kill , but to kill against their own interests. Various ways of persuasion were discussed; nationalism, economic opportunity, rank, prestige, social mobility, etc. Also concrete proposals were discussed and evaluated in this context: a voluntary army, a draft system, relying on acquired skills, or natural ability with quota systems. This discussion, animated by the realization of the male students that they would have to go in the army in two years and by the percentages of Blacks killed in Vietnam, led to the formation of a proposal titled "Possible proposals for organizing an army." The upshot was that no matter what was done, other than the quota suggestion, implied that the lower class would do the fighting.

The discussion then took a different turn towards military effectiveness. We left the concrete discussion of what would be the best army in a certain political situation we had encountered to what would be the most effective army. An army of draftees is not professional, but a professional voluntary army, although it might be a better fighting unit, might also be a collection of cut-throats and mercenaries who would not have the best interests of the nation in mind at all times. Therefore, the problem of training included instilling loyalty and character as well as technical and physical ability. How was this to be done? First, we tried to enumerate the qualities which we thought a good soldier or policeman should have and then ask the more difficult question of how we could educate people to have them.

Someone said that he didn't think a homosexual would be a good soldier and we talked about this. Others said that the army, especially if it was exclusively male, made people into homosexuals. Others said that homosexuals were born. Since we didn't know for sure which theory was correct several students volunteered to find out and bring back the information we needed. Others commented that soldiers would be sexually frustrated and since we were concerned with·character building we should not let their sexual behavior be determined by weekend passes, etc. Some suggested that the only solution to these problems was to allow women in the army. This led to a heated debate, the outcome of which was that men would be far too distracted to fight.

I thought that this was the right time to have the students do quite a bit of reading. Summerhill was available which offered a possible solution to the problem of educating a sexually sophisticated individual. Plato too offered the same possibility but in a different way. But in contrasting the two, a real problem emerged. If education is geared towards creating an independent individual who is free, then he wouldn't make a very good soldier. As Plato pointed out, you must curtail the individual's own interest and mold it into the interest of society. In trying to solve the problem of creating an army we were right back into politics. What kind of individuals do we want in our society, which means is freedom better than social justice. We read and contrasted selections from Mill and Plato and still the students were undecided. The semester ended in a discussion of what the product of the TCCP program was supposed to be and what the relationship between the program and the rest of the college was. Is it good to transform people into free individuals in a world that doesn't treat them as such?

Some might comment that the class was unstructured, going from one topic to another when there was but a very accidental relationship between them. Others might say that the students didn't learn anything because we came to no definite conclusions. However, I feel that the students did learn something and that the connection between the shifts in the discussion were much more than accidental.

Firstly, they had a feeling for the complexity and interconnection of the issues under discussion. In trying to solve a relatively isolated thing like what would be a good army, you had to know about the presuppositions of education, about whether character could be instilled in individuals, about the problem of innate vs. acquired traits, about the implications of women being equal, about the problem of freedom vs. social conformity, etc.

Secondly, they came to realize that problem solving is a compromise (a dialectic if you will). You can't possibly have everything, but you can work towards a goal of maximum accommodation. By realizing the problems involved in a given theory or solution the students could modify it and anticipate and hence evaluate their system. They knew the deficiencies of their solutions and the problems that might arise concerning it they would know how to overcome them in other sectors of the society. A free society might not be able to defend itself very well, nor would it be very efficient, but it would be better than a socially ordered one, etc. Can we overcome these deficiencies and still have personal freedom? If the problems remained unsolved they saw that ultimately they would have to revolutionalize the system altogether. They knew too that the one who knew the system the best was the one who could change it for the better, if he was perceptive enough and willing.

Thirdly, the students knew about social and economic manipulation and exploitation. They learned to take the point of view of the upperclass and see what their interests would be on concrete topics.

Fourthly, the students did have a feeling of accomplishment, they knew that I wasn't forcing the discussion and when they did come up with good solutions they knew them as theirs. One student said after a discussion that this sounds like a pretty good solution to me and we all had to agree. This sense of accomplishment motivated the students both individually and collectively. The classes were more vigorously animated by all. The students seemed to be more interested in what they read and they seemed to be able to understand and discuss what was said, probably because they were looking for something that could be of interest to their own project.

Finally, the students had a feeling of cooperation and interdependence in their academic pursuits. All kinds of experiences and knowledge could be fruitfully introduced into the discussion. Psychology majors, ex-servicemen, education majors, people from the lower classes, from the middle classes, people who had been in business, married people, people with talents in the arts, etc. All could offer important clues in resolving certain problems. This section lends itself to both inter-disciplinary work as well as a service course for all kinds of majors.

Our examination was a take-home examination handed out on the Monday of the last week of classes. Wednesday and Friday class periods were devoted to discussing the examination with the students and it provided them with an opportunity when they themselves, if they wished, could get together and collaborate. Basically we hoped that the student would systematically record their conclusions concerning the issues we had discussed.

Almost all the papers were good. They understood the relationship between the issues and most of the papers were consistent. Some of the students still thought that goals like equality and a wage scale according to talents and economic needs were compatible, but many realized that some compromises had to be made. The test allowed the students to be creative and lent itself to the students' individual interests and talents. Three students wrote works of social satire, some others created worlds akin to the lotus-eaters and the noble-savage conception. But even in these cases the students were critical of many of our institutions. Many who addressed the setting of the aftermath of World War III stated that they were going to create a society in which this hostility among men would never occur again. Others attempted to prescribe ways of overcoming racism and hatred among men.

It was interesting to see them formulating institutions to accomplish these goals and the important point was that they realized that institutions could have an effect on personal convictions and actions. Institutions were seen as stifling or liberating. It could not be said that the students had ideals but no way of accomplishing them. For instance there were various methods suggested for enforcing the laws which varied from educational means of eliminating crime (which most of the students thought primary to education) to policemen with degrees in psychology and sociology, to civilian response (similar to that in England against firearms), to a police force of draftees who rotate positions. The same kind of constructive variation could be found on other issues. The students all had dreams about a good and just society and once they had tried to figure out ways of achieving it and once they compared their thoughts with what was actually being done, they began to feel that really not much was being done. Anyone who knows that students are discontent, but doesn't know the reasons why, should read these test papers.

Finally, the students indicated a sense of interdependence. Three groups consisting of 19 students out of 32 came and collaborated on their exams. They collectively figured out what they wanted in terms of goals and then each individual came back with a sketch of the way in which he or she would achieve these goals specifically in answering the question assigned to her or him which was then subject to general discussion. One student might say that he had certain undesirable implications from his solution of the family set up which he thought could be overcome in the educational system; etc. The remaining students who worked independently or in pairs would come in and listen to the discussion or talk with me about possible approaches and problems they were thinking about. In general, I must admit that the exam was an overwhelming success and I invite anyone interested in looking at them to let us know.

CASE STUDIES IN COUNSELING

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The names of the counselees used in these articles are fictitious but the cases are real. I changed the names in order to preserve the confidential interactions between the client and the counselor.

The Case of William Lee

William is presently a senior in the Thirteen-College Curriculum Program at Bishop College. William is a native of Shreveport, Louisiana. He is twenty-one years of age and is the oldest child in a family of six children, the youngest of whom is three years old. Williams' mother is a divorcee and works as a nurse-aid at the Confederate Memorial Hospital. She completed the tenth grade.

William has experienced poverty and the horrors of growing up as a black child in a southern city that practiced segregation and discrimination to the fullest extent together with extreme punishment and at times harassment toward its black citizens. William vividly recalls a terrible beating which he received at the early age of five by a white man while he was going to the grocery store to buy a bottle of soda water for his mother. He was passing a house when a white man and his wife who were sitting on their porch and called him and offered him a piece of candy, when William approached them for the candy, the white man grabbed him and beat him horribly, without explaining why. Willie returned home crying and bleeding and his mother cried also, but nothing was done about it because of fear.

"I must grow up and change conditions in this city or get out" was Williams' childhood dream. He decided to work hard and go to college to be a lawyer while in grade school. William made good grades in elementary and high school which enabled him to enroll at Bishop College in 1967 as a student in the Thirteen-College Curriculum Program.

William has maintained a high scholastic average at Bishop. He has remained on the Dean's List during his Sophomore and Junior years and is a member of a fraternal organization, the Circle K Club, and many other student activities. He is considered to be one of the most outstanding young men in his class and in the TCCP department. He has received a scholarship annually and other grants and loans since enrolling at Bishop. William may be described as a brilliant, strong-willed, honest and appreciative young man. He expresses himself well orally as well as in writing. It is amazing how he achieved such skills in black schools that are referred to as being so inferior and in a poverty-stricken home.

Life was growing brighter for William until he went home during the Easter holidays of 1970. While in Shreveport he and his cousin and a female friend of his cousin were riding in the suburb of the city late one night. They were approached by six policemen in three cars. They ordered the three of them to get out of the car and started beating the men. They continued beating them after they had been handcuffed. William became unconscious. They placed the two young men in one car and the girl in another. William did not see them beat the girl before they placed her in the car, but when they arrived at the court house the young men were conscious and observed that the girl had been beaten in the face until her eyes were swollen and her face was bloody. She was afraid to speak. The policemen filed charges for aggravated assault and battery on the girl against William and his cousin. They tried to deny the charges and tell the true story but they weren't allowed to do so. They were hurriedly placed in jail where they remained until their parents and relatives could get them out on bond. William returned to Bishop a week later, hiseyes were red and his face swollen and a scar was on his head. He also complained of soreness in his body.

William's mother wasn't able to hire him a lawyer. He returned to the court house with a doctor's statement about his injuries but they made a mockery of his charges and failed to record them. A few weeks later William received a notice to appear in court for a trial. He borrowed his fare home from a faculty member. Although he didn't have a lawyer he believed that they could somehow prove themselves to be innocent.

On the date of the trial, the policemen failed to appear and so did the girl. They accused William and his cousin of running the girl out of town and threatened to send them to the penitentiary at the next trial. The trial was re-scheduled for the next Friday. William returned to school frightened and disappointed over the fact that they failed to dismiss the case after the policemen and the young lady failed to appear. Once again he came to me worried about the possible results of the next trial. He was also disturbed about the possibility of loosing the job which I had helped him secure for the Summer. William was anxious to work and save money for himself and his younger sister who had applied for the TCCP program in the fall of 1970.

The plight of this young man caused much concern from me. We discussed his problems thoroughly. I felt that Willie not only needed a counselor but a friend and an attorney. We decided to leave my office and go into the city of Dallas to a free Legal Service Bureau for advice from Attorney Somack. Attorney Somack listened to our story but regretfully informed us that his services did not apply to cases of this nature in Dallas or outside of the city. He said that Willie needed to talk to someone from Louisiana who might be able to suggest a lawyer in the state of Louisiana whom he could trust and seek assistance from. He sent us to a Minister from Louisiana for further assistance. The minister informed us of a black lawyer in northern Louisiana who might be able to help us. He called him long distance for us and we repeated our story. Attorney Alfred Mitchell of Placquemine, Louisiana heard our plea and informed us that Southern Louisiana was a difficult area in which to win a case, but he agreed to render his services free of charge if we would pay for his transportation and a place to stay. He instructed us to call Judge Whitmeyer in Shreveport and ask him to postpone the case to a later date in order to give him time to prepare for it. He emphasized the fact that this was a legal courtesy that was supposed to be granted since he had secured a lawyer only three days before the trial.

We returned to my office and called Judge Whitmeyer long distance; he had turned the case over to Judge Miller. We called Judge Miller and he emphatically stated that he could not postpone the trial any longer because all witnesses had been subpoenaed for the trial on Friday. We asked him for the telephone number of the District Attorney John Rickey; when we contacted him, he responded in a similar manner to the previous judge but I informed him that William's lawyer had advised William not to appear for trial if they failed to grant him continuance and to inform the powers that be that he would contact them later. I also told the District Attorney that I was coming with William and his lawyer as a character witness and to assist him in any way possible.

Attorney Rickey asked me to give him time to look into the matter and he would call me back within an hour. William and I waited but the hour seemed to have passed so slowly. It seemed like the 59th minute of the hour when the telephone rang. It was a collect call from Attorney Rickey. His tone of voice had changed and he made the following statement; "Mrs. McGaughey, I have some good news for you and William, (pause). Well, I have investigated the case and found that the girl had left town, therefore we have decided to drop the charges. Tell William he is a free man. If he is guilty, tell him not to do that again, and if he isn't, then forget it." William and I thanked him sincerely, but in my last remarks I reminded him of the terrible beatings that the three Negroes received from the six policemen. I asked him to please investigate police brutality in the city of Shreveport. I told him that it troubled me to know that William had not been able to file charges for this most brutal experience, but since William had a job waiting for him to work and earn money for his Senior year and his sister, we would consume time pursuing the case further. I also told him that William was studying to be a lawyer and someday I hope that he would be able to join his legal force and fight for justice for all men in his home town.

William and I rejoiced together and he hurried to work. He wrote Attorney Mitchell and thanked him and asked him to please get a legal release in writing to make sure that his case had been scratched from the records.

The Case of Elvis

Elvis is twenty years old and has attended Bishop College for three years as a student in the Thirteen-College Curriculum Program. Elvis is a native of Texarkana, Arkansas where he resides with his mother and four brothers, three of whom are older than he. He doesn't know his father because he was born out of wedlock, this fact has created much concern and embarrassment for Elvis.

Elvis' mother dropped out of school in the eighth grade and is presently unemployed. Life for Elvis has been filled with hardships and disappointments, but his greatest desire is to finish college with a major in physics and a minor in mathematics. According to Elvis' high school transcript and the excellent grades which he made during his freshman year at Bishop College, he has the potentials to succeed in these chosen fields. The scores that Elvis made on the ACT Test indicated that he excels in sciences and mathematics also.

During Elvis' sophomore year he was required to take two courses in the TCCP program and three courses in the Regular College Program. In the Fall Semester Elvis pledged for a fraternity which consumed a lot of his time and he also complained about serious headaches. I often referred him to the nurse who made appointments with the Bishop Medical Staff for him.

At the end of the Fall Semester his grade-point average dropped to 1.21. He was formerly an honor student. I invited him to come to my office for another conference. He complained of feeling depressed and tired, but he assured me that he was going to organize his daily schedule of activities and improve his study habits. At the end of the Spring Semester his grades did improve but not to the extent that he was accustomed to achieving.

During the third year Elvis' grades dropped to 0.00. He attended classes regularly but he didn't seem to be able to study or concentrate. "I feel tired, frustrated, depressed, tense and imprisoned" was his remarks. I observed that his eyes were red with a glaring stare, his face showed tenseness and he seem to have difficulty expressing himself; he would pause and stare into space at times before completing a statement. Elvis brought me an article that he wrote which emphasized the fact that he felt like a stranger, afraid in a world that he didn't make. "I am afraid because I don't know anyone or anything here. I didn't make the world but who can I point the finger at? Who can I blame for being in a place that I never made?" He expressed fear and repeated statements similar to the ones listed above throughout a two-page article.

Elvis complained of not being able to sleep soundly at night. One of his instructors gave me a biographical sketch that he wrote for his class in which he expressed concern about himself and a feeling that he needed to see a psychiatrist. The instructor also observed that he seemed to be staring in space in his class. He seemed to have been present in body only.

Bishop College does not have a psychiatrist on its medical staff and non-residents of Dallas cannot receive aid at the city hospital in Dallas free of charges. Elvis could not afford to pay the enormous fee that psychiatrists charge, so I proceeded to search for some means of getting aid for him and two other students that I was interested in referring to a psychiatrist.

I discussed this problem with one of the student's instructors and together we contacted a Negro psychiatrist who lives in Dallas but is employed at the State Hospital in Terrell, Texas, he also serves as a part-time psychiatrist at SMU University which is predominantly a white institution in Dallas. He has an office in Dallas where he works after 6 PM. Incidentally, Dallas now has two black psychiatrists. The other one works at the Veterans' Hospital full-time.

After presenting our need for assistance to Dr. Emmitt Emory and informing him that the young man was his Fraternity Brother he consented to accept these cases without charges; he also stated that he was aware of the need for such services for the Negro citizens of Dallas and said that he would be willing to serve as a part-time psychiatrist at Bishop College if the President would place him on the medical staff.

I felt like shouting for joy and rushed back to Bishop College to tell the good news to my counselors. I arranged to secure full time jobs on the campus for all three of the students so that they could earn enough money to pay their room and board for the summer and save some money for the Fall

Semester while taking treatments from Dr. Emory.

Elvis gladly consented to go. I took him to the office on his first visit and he expressed a desire to go on his own thereafter. One of the young ladies had gone home to Louisiana and her mother refused to let her return when I called her. The other young lady is working but she refused to go. I was very tactful in my approach. She expressed a desire to lose weight first, and if her emotional problem failed to improve she would return to me later.

I went to the Director of Student Personnel and related my experiences and asked him to assist me in contacting the President about adding Dr. Emory to our medical staff. Colonel Smith was very much impressed by my efforts and immediately wrote the President about the offer that Dr. Emmitt Emory had made. He also told him about the free service that I had been able to get. Two weeks before I came to Pine Manor our school nurse informed me that they were contemplating adding Dr. Emmitt Emory to our Medical Staff this Fall.

Elvis is keeping his appointments with Dr. Emory and he appeared to be happy when I last saw him. He said that he was feeling fine. The blank expression had gone from his face. He said that he is going steady with a young lady now also. I often watched him standing or strolling on the campus with his new lover. As I watched from my office window, I smiled to myself and said "Yes, he has come alive, he isn't lonely any more; he is a radiant, wide awake young man."

Elvis informed me that he started taking two courses during the second half of the Summer session in order to bring his average up. He is enjoying the courses. Presently, he is on probation, but if the Dean decides to suspend him this Fall on account of his low average, I will again be found asking for another opportunity for Elvis to remain in college and continue his treatments.

The Case of Lena Mae

Lena Mae will be classified as a Sophomore in the Fall of 1970 but she was a Freshman when I first started counseling with her. Lena Mae is 21 years of age. She was born in a small town in Texas. There are two boys and two girls in her family, Lena Mae is the oldest. The father of this family deserted them when the children were very young and their mother was forced to support them as a cook for a white family. The mother dropped out of school in the eleventh grade.

Life was difficult for Lena Mae during her childhood so she decided to join the Job Corps after graduating from high school. The Job Corps was a delightful experience for Lena, she completed a secretarial course while there which provided with excellent skills in shorthand, typing, bookkeeping, etc.

Lena worked for a short while after leaving the Job Corps, but later she decided to enroll in Bishop College and continue her education in the Thirteen-College Curriculum Program. Lena made excellent grades and excelled as a student secretary in one of the administrative offices.

Lena is a serious minded, mature young lady and was adjusting well in college until her mother died suddenly just before Christmas in the Fall of 1969. The death of Lena's mother was a threat to her, because she knew that the responsibility of providing for the family was hers. She was also very sad and somewhat bitter because she believed that her mother's death at the young age of 38 was due to the hard work and sacrifices which she had made for her children. Her greatest desire was to graduate from college so that she could relieve her mother of some of her burdens. Lena hated her father with a passion for deserting her mother. She could not understand how he could live in the same town and ignore them completely.

Soon after Lena received the message about her mother's death, she came to my office with tears in her eyes and said "Mrs. McGaughey, I must return home and care for my younger sisters and brothers. I don't know what I'm going to do for a living in that small town other than to be a cook or a maid like my mother. There are no jobs available for Black secretaries."

One of Lena's brothers was also enrolled at Bishop College as a freshman. Lena and her brother had decided to drop out of college. I asked Lena if she had considered bringing her sisters and brothers to Dallas to live so she could get a better job and if possible remain in school. Her reply was no, because her mother was in the process of purchasing a small home and she didn't want to lose it. She also said that her mother had enough insurance for an ordinary burial, but she didn't leave any money.

Lena's plight was made known to our Director Mr. Clesbie R. Daniels and to her instructors. Everyone became concerned. I gave her money with which to purchase groceries for Christmas. After much discussion Lena decided to move to Dallas if arrangements could be made for them to rent one of the married students' apartments on the college campus. We contacted President Curry and he complied with our request. She decided to lock up their home and get a neighbor to watch it for the present time. Rent is so cheap in their home town until she wanted to keep the house and their furnishings so that they would have some place to go on holidays, etc. Mr. Daniels and members of the TCCP faculty gave her money to pay for the cost of moving to Dallas. The family moved during the Christmas Holidays. The younger sister and brother attend a high school nearby and Lena and her older brother remained in Bishop. The apartment rents for $85.00 per month which Lena and her brother thought they could pay by working part time at Bishop. Unfortunately, the brother was unable to get a job for the Spring Semester but Lena didn't tell us, she decided to try to pay the bills alone because she wanted to be independent if possible. She earned $120.00 per month which left very little money for food and other necessities after she paid her rent.

We did not know that her problem was so serious until she came to assist me with some office work after leaving her job daily at 4:30 PM and worked for me until 9 PM. She earned $2.50 per hour working for me after school had closed for one week. I observed that she didn't have many clothes and complained of having stomach cramps. I asked if she was eating properly and she said that she was dieting and ate only once each day. I discussed the dangers of dieting in this manner.

Lena failed to return to her regular job on Monday due to illness. I became concerned and went to see her. Upon my arrival I was amazed to find only a pot with a few beans boiling on the stove. They didn't have any bread or any other food in the kitchen, the refrigerator only had two eggs in it. I looked at her and asked if this was all that they had been eating? She said "yes, and only a small amount of beans at a time because they must last until I get paid two weeks from today." Only then did she tell me how much they had been suffering. The older brother was still without a job. The younger brother had dropped out of school and returned home because of their problems but he hadn't been successful in getting a job there either. The older brother was lying across the bed hungry and disgusted because he had used almost all of the gas in the old automobile which their mother left looking for a job for the summer and had not found one. He didn't have money to purchase more gas. Lena said that we had been so kind to them until she didn't want to ask us for more help.

I took the brother with me and filled his automobile with gas. We went to the store and purchased $28.00 worth of groceries. I found her brother a job the next day. I called the city Welfare Department and talked with a friend who works there. Arrangements were made to give them a month's supply of groceries and a welfare check for $50.00 to purchase vegetables, meats, etc.

Lena cried for joy. She said that she didn't know that people could be so kind. I also purchased some drug items and offered to take her to a doctor. She insisted on using the drug items and eating to remove the stomach cramps. Three days later she returned to work feeling and looking better.

One of our TCCP Science teachers gave her sister a part time job in his department for the summer. When Lena received her salary she offered to refund my money, but I told her to keep the money and purchase a few clothes for work. She only had one dress, a skirt and two blouses that she could wear. When I left for Boston she appeared to be happy and had started losing weight the right way.

A Note on Personality Clashes Vs. Academic Achievement

If the many reasons why students fail or drop out of school could be carefully analyzed, several causes could be traced to personality clashes. The reasons for such experiences can often be traced to some students' reactions toward their instructors and on other occasions the personality clashes grow out of some instructors' attitudes toward the students.

In some cases the students disapprove of the method that the instructors use in teaching. According to information gathered from interviews with students, some of their major complaints center around the instructors who use the dictatorial method of teaching by constantly lecturing and requiring the students to take notes, memorize them and pass all tests. In some cases they are asked to write their notes in a notebook and turn them in. The students feel that they don't have any opportunity to think and reason for themselves. I have heard students say "If I ask a certain instructor a question, he responds in a harsh manner as if I have threatened him. He seems to think that I should be forced to agree with everything one author says or else with how he feels about certain points of view. These complaints are made about a few instructors who are experiencing some difficulty in changing their methods of teaching to the philosophy of teaching and learning recommmended by the

Thirteen-College Curriculum Program, but most often students from the Thirteen College Curriculum Program experience these difficulties with some instructors in the Regular College Program. I have heard students say that some instructors' voices sound like a cracked record playing antique, uninteresting speeches that either bore them or force them to sleep. Well do I realize, however, that there are some students who stay up most of the night and go to classes sleepy. There are always some exceptions.

I have talked with some students who had stopped trying because they decided that they didn't like the teacher's personality. They would cut classes, go to classes late or disrupt the class intentionally in order to upset the instructor. As a counselor I tried to help the student decide if these were proper methods to use to display his resentments and the possible consequences. I also questioned him about his purpose for coming to college and how he expected to attain his goal.

What methods do you use to motivate students? Does threatening a student with a failing grade prove to be your most successful method of motivating him? Does embarrassing the student in the presence of others really help him or does it serve as a method of relaxing your own emotional stress?

Some students and instructors are guilting of forming opinions about an individual based upon his outer appearance only. I have heard some instructors say, "I just don't like how a certain student looks, I hate to see him come into my class." On the other hand some students feel the same way about some instructors. It is normal for each individual to formulate his likes and dislikes and set up his own value system, but should we be guilty of measuring everyone entirely by our own values to the extent that we will interfere with one's freedom to achieve to the fullest extent of his capabilities? One of the most essential phases of learning is that of learning to live and interact with others.

Since all behavior is caused, I have found it quite rewarding to put forth some effort, perhaps in a private setting such as private conferences, etc, in order to get a better understanding of why an individual feels and acts as he does. At the same time the individual will have an opportunity to understand you better. I can recall some cases where some students appeared to be hostile and indifferent because they were emotionally disturbed or in some cases they had physical complaints that needed medical attention.

Some students have a tendency to associate instructors with courses that are difficult to them unconsciously. One of the most common causes of students' poor performance in classes is based upon the fact that the student can't read and comprehend. If an instructor discovers or suspects a cause to exist that he feels incapable of assisting the student in resolving, he should readily refer the student to the counselor or some other proper source. An instructor should not be satisfied with failing a student until he has exhausted all possible resources for helping the student.

In order to help a student make proper adjustments, it sometimes becomes necessary for the student to transfer to another instructor. In cases where the student requests such a change, both instructors should approve of the change without creating ill feelings. Sometimes a change will give a student an opportunity to take a second look at himself as well as others.

Let us pause for a moment and recall our past experiences in school. Can you recall some instructors that you liked better than others? Didn't you enjoy some instructors' methods of teaching better than others? Didn't you receive some grades that you had reasons to question? Don't you appreciate some instructors' efforts since you have become an adult more than you did as a student? Can't you recognize some of your faults as a student today more than you did during your youth?

Many youths and adults are guilty of forming mental blocks based entirely upon age differences, racial differences, and even differences of opinions that tune others out of your mind completely. These mental blocks can very often be attributed to communication gaps. Too often the popular term "Generation Gap" is actually a "Communication Gap." Age differences have always existed. For centuries adults taught their children to obey without questioning them. The so-called modern generation is seeking an opportunity to think, create, and revise for themselves. They feel that they have been exploited even to the point of adults determining whether they should live or die.

Mental blocks can cause adults and youth to become extremist or radicals in their behavioral patterns. Youth and adults possess an abundance of ideas and knowledge gained from educations and experiences that could contribute to each other's mental, emotional, physical and spiritual growth if only they would listen and share with each other. Let us keep in mind that the youth of today will be the adults of tomorrow. The kind of experiences which one has in his youth, help mold him into the kind of adult he will be.

Respect is another important word that can reduce personality clashes. Each individual should respect all others as human beings endowed with the same rights and privileges that you want for yourself. We were born with individual differences for a purpose. The world would be uninteresting, non-progressive and unattractive if everyone was identical.

Let us keep in mind that everyone has his rightful place in the scheme of things. Let us cease hating, envying and penalizing others by various means and help each other to discover and develop those qualities which he possesses to the maximum of his ability. We cannot afford to continually waste our human resources.

A YOUNG BUT TRADITIONAL TEACHER GOES EXPERIMENTAL

Sue T. Fishman
Ideas and Their Expression
Jackson State

I will preface my report by a brief description of a quandary I have found myself in this year - a quandary I do not think peculiar to my own experience as a Thirteen-College Curriulum Program teacher. Throughout the year I have fluctuated constantly between two concepts of English education. First, that the study of literature and writing is the study of forms, that the work is a construct and that this construct must be analyzed to be understood on its own terms -- that it should not be merely a vehicle for the student's own concepts and that its worth is based not primarily on its immediate relevance; and second, that direct involvement of the student is necessary to learning--that he must be able to use the forms he studies, to discover variations upon these forms, and to create his own patterns of communication, and that he should be encouraged to express his own thoughts and ideas about the subject the author treats.

I have sat through sessions in which other teachers have presented beautiful samples of their students' creativity, and I have thought of students who may and do hit upon a turn of phrase or a 4-line poem that is startling in its originality but who cannot write 3 well-formed, clear, grammatically correct sentences in a row. I have pondered units geared to elicit total student response: trials, debates, chamber theatre, dramatizations, improvisations, and I have engaged in classroom discussion of a 1-page article in which it appeared that no two people had read the same piece, in which at least 2/3 of the class seemed to unable to read and understand the points the author was making.

I have taught students whose intelligence and background are superior, who make A's consistently in every written and oral assignment. In the same class, I have had students who, literally, are illiterate. As a white and as a Yankee, I have been struck by southern Negro dialect, by the effectiveness of colloquial expression, by the strength of certain phrases. As an English teacher responsible for ensuring the success of my students in communicating clearly to a world outside the South and the Black community, I have shuddered to think of the effectiveness of letters of application these students may write for employment or post-graduate study.

And so, I have muddled through; like a man climbing a very steep hill, I have spent as much time going across as I have going up. At the furthest points in each direction, I have two memories. The first is of me, lecturing on beliefs of the Buddhist religion. The second is of me, sitting in the back of the room, trying desperately to be a student, playing a word game invented and presented by two students responsible for explaining one chapter of Siddartha, in an experiement during which the students taught themselves for three weeks. And this was with one book, in the space of 21 days! I am not completely pleased with my year's work but I am grateful for the opportunity it has afforded me to formulate and evaluate a theory of education which at least attempts to deal with the conflicting values and diverse realities in the process of education.

Fresh from a summer conference which I found to be stimulating, if somewhat unrelated to what one year of teaching Jackson State students had caused me to believe their basic need was, I returned to school with enthusiasm, if not confidence. I was determined to infuse the exhilaration of creative writing and improvisation into the learning of basic writing skills.

We began, therefore, with descriptive writing. The first exercise was to "paint" a verbal portrait of a classmate, based on three minutes of close, silent observation. From this beginning, we moved on through all phases of sensory description: sight, sound, touch, smile, and taste, using the Thirteen-College Curriculum Program units on Descriptive Writing as a source of models.

My primary goal was to give the students an anchor in the concrete and objective, to check their tendency to abstract beyond intelligibility and to employ overused trite romantic metaphors. Further, I wished them to open themselves to the possibilities for inspiration and creativity inherent in the world around them. We looked at people and dying flowers and "special places" provided by the campus. We listened to ourselves, to a teacher down the hall, to music, and to the sounds of a dormitory late at night. We touched hands and faces and dirt and stuffed animals and imitation flowers and kitchen utensils. And we smelled and tasted dining hall meals and the wonders of home cooking. And each time we explored another aspect of the world, we recorded our impressions in writing that, through its vocabulary and rhythm, sought to recreate these personal experiences for others. Using the criteria of: simplicity, sensuality, rhythm, and emotional effect, we judged each other's work and our own and offered suggestions for improvement.

I liked this approach, for I think it automatically overcame much of the fear of writing. It allowed for individual freedom (there was no "right" or "wrong" response), but at the same time, it offered certain criteria for judgment (there were "better" and"worse" responses). More important, the "rules" did not appear arbitrary to students, for they had struggled with the problem before they knew such "rules" existed and had discovered many of them for themselves. Furthermore, this approach often had the effect of "turning the tables," for students who were "straight," in the sense that they had played by the rules and received good marks in high school, often found their writing judged "unexciting" by classmates. On the other hand,weaker students often excelled in insight and observation. Also, the assignments, and the critical approach toward them highlighted the necessity for revision as an important aspect of writing. Finally, concentration upon and exploration of concrete images naturally emphasized the importance of specific examples to support points made in expository writing. And I used the short assignments as diagnostic tests of mechanical skills and followed through with individual conferences which served to point out and explain errors in sentence structure and grammar.

What followed this gravitation toward the "creative" pole, was a transitory period which utilized the old Identity Unit as a springboard for self-description. Quite frankly, this flopped. Perhaps it was too soon to expect students to tell me who they were. Perhaps, no, definitely the material was too dated, too unrelated to the "movement" or perhaps it was not "personal" enough. Or maybe a white teacher shouldn't even tackle Black identity. Anyway, I assigned only one paper during this period and I didn't even like that one. Should have skipped the unit and read The Learning Tree. Well, chalk it up to experience!

Enough of that--on to Choice. We began with the Mandarin Unit, which I don't like because it is contrived, too abstract. There are literally thousands of very real choices we have to make, and the virtue of this assignment--that there is no "right" or "wrong" choice was redundant to students who had already discovered this through analysis of descriptive writing and fairly open class discussions.

But we did have some fun and derived a great deal of value from the short stories, especially de Maupassant's "The Piece of String." Students were struck by Hauchecorne's inability to defend himself, by the power of circumstantial evidence to ruin a man, by the question of guilt as it applied to intention and act: "But he would have picked up the wallet, if he had seen it!" So, and I don't remember how, we decided to have a mock trial of Maitre Hauchecorne. A judge, a prosecutor, a defense attorney, and three witnesses for each side were chosen. Chaos followed. All sorts of irrelevant evidence was introduced; lawyers ended up proving the case of the opposition; witnesses contradicted themselves; the jury became outraged (shades of Chicago!). Before the summations of prosecution and defense, I halted the proceedings and opened the floor to comments. The poor lawyers!! Basically, the criticism directed itself to the following faults: lack of assertiveness, lack of supporting details, poor selection of evidence, and lack of logical organization and development of arguments.

I saw this as an excellent opportunity to provide students with a structure for persuasive writing, which could be applied to most forms of exposition. Therefore, I gave the assignment of writing a summation for either the prosecution or defense, which would convince others of Hauchecorne's guilt or innocence. After they had wrestled with the assignment without previous instructions, I outlined the "I" or thesis structure and emphasized the importance of development through specific examples. The students then rewrote their papers, which had been strong on development but weak on organization.

I am firmly convinced of the necessity of providing students with a basic outline for exposition. The "I" form, although not without flaws, seems to be the most flixible approach. If the student can derive a thesis, he is practically home free. The toughest thing about writing is beginning. The second is continuing with a degree of coherence. The "I" form allows the student to do this.

So, at the end of the fall quarter, all students had been exposed to and many had adopted certain rudimentary techniques of expression. A small achievement, you say? I don't think so. None could deny the basic intelligence of these students but most would acknowledge deficiencies in educational preparation. I did not encounter major problems of motivation. The Thirteen-College Curriculum Program materials are, for the most part, worth reading and discussing. They are interesting, so the students are interested. I did not give long assignments; no one had to struggle to keep up. All could easily complete the assignments; many could go beyond them, and did.

Due to a school policy, no one received an "F" for the first quarter's work in English. Those students whose deficiencies were too great to master in twelve weeks were given grades of incomplete. Throughout the winter quarter these students met with me one or two hours a week outside of class. All of the five attended these sessions regularly. All made real progress. Two worked and "made it." They still have problems, but they are on their way.

Two, who were almost illiterate, worked and are still working. Their problems may be too great to solve in one year--indeed, we may never overcome the damage done by poor schools and overworked, undereducated teachers. But they are trying and they have improved and they should be given the benefit of the doubt. One never did really give a damn. She doesn't want to be in school and shouldn't be at this time. I can't reach her and, frankly, I don't care. I have tried.

The Winter quarter seems very fuzzy to me, and this may be because it was. Once again I was on the horns of a dilemma. We were moving into literature, my first love. What I was most interested in was that the students learn to read closely, to appreciate subtlety of style, as well as plot. Also, since the Identity Unit seemed to have flopped so badly, I thought the three novels: Go Tell It On the Mountain, Siddhartha and Manchild in the Promised Land would give us a second chance at determining who we were and why. Of course, I wished to maintain an experimental approach, so I decided to concentrate on Chamber Theatre techniques for analyzing point of view and character development in James Baldwin's novel.

I explained briefly what Chamber Theatre was, distinguishing between it and dramatization. Then I broke the class up into groups, with each group responsible for choosing and presenting a short passage which they considered important to an understanding of the section of the novel they were to cover and which afforded them a chance to "get into" point of view, Baldwin's experimentation with different dialects and techniques of character development. Each group was allotted ten minutes for their presentation and the rest of the class period was devoted to a discussion of the presentation and the section of the novel from which it was taken.

I'm not sure whether the class really understood point of view or Chamber Theatre when they were finished. At first, "the play was the thing" and scenes seemed to have been chosen on the basis of their dramatic possibilities, rather than their literary merit. But, after a few presentations and some general critical sessions, students began to play around with a chorus effect to split up narrative passages, and to use the technique of repetition of certain phrases. At least they began to see a difference between the narrator and John and to look upon vocabulary as a key to locating the speaker. What the approach did succeed in doing was to almost force a close reading of text.

I thought I was doing right, staying out of things as much as possible, but apparently I wasn't. The students took a test just before Christmas vacation. And man, did they do a lousy job! I returned, raging, and handed the papers right back to them, ungraded. I also took the opportunity to shake everybody up about contributing their best to classroom discussions, as well as writing assignments. Well, they weren't the only ones who were shaken up. After I had finished up my harangue with a plea for criticism (If you don't like what's going on, or disagree with what I say, say something about it!), someone did! Aren't teachers funny? And I quote: "Mrs. Fishman, you tell us to question you, but you always want to be right." Well . . . I decided honesty was the best policy, so I answered, "That's true, don't you?" We had a very good discussion, sort of ego-busting, but good. As a result, I decided to voluntarily abdicate. We were about to begin Siddhartha, so I told them that they could teach the book, in any way they pleased. Oh, my beautiful Siddhartha!

Groups of two or three students were assigned chapters. They were responsible for formulating a lesson plan which was submitted and discussed by us before the class, for actually conducting the class, and for writing an evaluative report on their presentation.

Most popular were various game situations, in which the class would be divided into competing groups--something like college bowl. They worked on character, concepts and vocabulary. There were some improvisations and honest discussions of problems encountered in reading the book.

Classes varied greatly in effectiveness and the enthusiasm of students and teacher waned toward the end due to my failure to pace the sessions rapidly enough. But some good ideas emerged and I can honestly say that the students read, analyzed, and understood that book. And most of them loved it. Being responsible for teaching a particular section made them realize that they "had a stake" in the novel. Some who had at first put the book aside because of its difficulty returned to it after they had read the particular chapter they were to present.

I came away from this experience firmly convinced that student teaching is one of the best methods of instruction, but that it is one of they most trying for a teacher to undertake. It is so terribly difficult to surrender authority, to be still when you feel a student is "murdering" one of your favorite books. But perhaps this dread is not necessary. I tried too hard to stay out of it, to play the role of student. I should have trusted my instincts more and jumped in when I really had something to say, instead of fuming guiltily. I should have been "real."

I consider this experiment to be one of the most important experiences for the class and myself. If it did nothing else (and it did do a great deal more), it demonstrated the willingness of a teacher to abdicate authority voluntarily when presented with valid reasons for doing so. I think that this helped more than any other single thing to gain the confidence and respect of my students, although it slmost killed me.

At the end of Siddhartha I asked the class if they wished to continue this approach with Manchild. They demurred: "Mrs. Fishman, this is really a great book and we want to get the most out of it. Sometimes we don't ask the most important questions."

But I had learned my lesson. We approached Manchild in a more sociological manner. At first, the style was what fascinated everyone. How funny Brown made a rather horrifying situation appear, how alive and warm! But as Brown's tone shifted, so did we. We got into the problem of the ghetto: crime, drugs, poor schools, lack of strong families, welfare. I guess we looked at the book, at this point, as a series of case studies. And we talked about solutions, based on attacking the causes directly. In fact, one of the questions asked on a follow-up test was to point out the causes of one such problem of ghetto living, by analyzing the history of one of the characters, and offer a solution to it.

End of second quarter!

I don't know; something happens to me at the end of a quarter--call it panic. I begin to doubt. If I've been "traditional" I worry that classes are getting too "tight." If I've been "experimental," I am sure they are getting loose and fuzzy. This quarter break was no different. To my usual dilemma was added the knowledge that the regular English program at Jackson State concentrates, in the Spring quarter, upon literary analysis of short stories. I have taught this course twice before and I like it. I find it fascinating to investigate the technique of an author, to view the short story as a work of art, rather than simply a forum for ideas. And, for the most part, I have been fortunate in imparting some of that aesthetic delight to students.

Also, by the end of the second quarter, it had become apparent that at least 1/3 of my 54 students were still having considerable difficulty in all areas of composition. Therefore, I decided that I would try to arrange my two classes so that I could spend more time on writing with the weaker students.

So, at the beginning of the Spring quarter I found myself teaching two different classes in the 13-College Curriculum Program, as well as a third class in the analysis of the short story.

In the Thirteen-College Curriculum Program "advanced" class, we began with short stories, since I wanted to make sure that our students acquired the same tools of literary analysis as those enrolled in the regular program. We used "The Horse Dealer's Daughter" as a "core" story. Through it we looked at the relation of conflict to theme, of setting to atmosphere and character and of symbolism to central concepts and character development. We had actually dealt with many of these things before, but always tangentially. I wanted the students to become familiar with literary terms and to see literature as art, a work whose structure was as important as its "message." There is a danger in Thirteen-College Curriculum Program of looking at literature as a form of propaganda, especially black literature.

From "The Horse Dealer's Daughter" we went on to other stories and then to drama, beginning with Desire Under the Elms, which I think is fairly weak. O'Neill is much better than this. I think this is a good example of the damage that may be done to a course by the adoption of a straight thematic approach. However, the stage setting and the symbolism of the play provided for a continuation of the analysis begun with short stories.

The family motif carried us into A Raisin in the Sun which is timeworn but venerable. Through it we viewed the conflicting images of blackness and the indomitability of the dream and its dreamers. The dream carried us into Death of a Salesman and some of my hopes for the class seemed to have been fulfilled. They caught the conflict between dream and reality right away, and were able to view the technique as an extension of the theme. Form and idea came together and they appreciated the artistry of the production. We dramatized scenes to get at technique, to demonstrate graphically, as Miller did, Willie's madness. Students who had been hanging around the edges of the play got into it, became involved in the tragedy of Willie. I love this play and I really enjoyed the sessions we spent with it.

And then Antigone, and the tragic vision of the Greeks introduced a short venture into responsibility. It may be that the translation is poor, but after the other plays we had read, Antigone seemed rather tame. Perhaps it's my fault. I say the play as rather simple, the students read the background in Hamilton's Mythology and read the play and saw the injustice of the law but recognized Creon's problem and understood his punishment as inevitable, given Greek philosophy. We didn't spend much time with it--about three class sessions. Oedipus Rex is subtler and perhaps would have been better, but I don't know.

Thoreau's essay on "Civil Disobedience" met much the same fate. Indeed, we barely discussed it at all. It served as a springboard for a general discussion of problems at Jackson State, ranging from our program's lack of a field trip to the survival of a Black College in Mississippi to the possibilities of violence as a solution to the racial crisis. Poor Thoreau sort of got lost in the woods.

"A Modest Proposal" fared better, perhaps because I was better equipped to deal with it as a literary form, peculiar and powerful. At first students thought the man was crazy, but I spiked the black board with headings like:

> "Ghetto Mother Urges Extermination of People to Save the Rats"
>
> "Former Black Principals Petition Old Miss for Assistant to the Master's Degree Program"
>
> and
>
> "Negro Mothers Urge School Board to Include Course in "Sweeping" in Local Special Education Programs"

When I explained that Swift was an Irish man, things began to fall into place and students became excited about the possibilities of irony and satire as a means of protest and are writing their own "Modest Proposals" this weekend.

Now we are beginning a section on poetry. The goal is to highlight the union of form and content, to show the importance of structure to idea, to celebrate the beauty and sense of literature as art. I hope that both the students and I have the strength to "do right by this." It has been a long year and we're tired. I've made mistakes and lost some students along the way, but I've had a few successes. I haven't played many games and, somehow, now I can't. I respect these kids. And I respect my subject. I've tried to make each respect the other.

Now you're wondering what happened to the "other" Thirteen-College Curriculum Program class. Well, we started differently, but we ended at the same point. Remedial instruction can be debilitating to student and teacher if extended past the period of its usefulness. I tried to clear up some basic problems in the first 3 weeks and then decided that any further possible gains represented a great risk in loss of self-esteem and interest for both the teacher and the students.

The basic difference between the two classes whas that the weaker students began with an exercise in expository writing that I felt would help them to attack essay questions with the confidence that they had a way of dealing with them coherently. We used "Is Anybody Listening to Black America" as a source. After discussing some of the issues raised, I assigned Charles Hamilton's article on Black Power to be read and discussed and later summarized.

It was during the discussion that I realized how far some of the students I had taught all year were from exhibiting any degree of competency in reading. Oh, they were not reluctant to express their own opinions on the subject but neither were they reluctant to ascribe to Hamilton their personal ideas often in direct contradiction with what the article stated. We went through that 1-page article paragraph by paragraph, sentence by sentence to discover its author's argument and the points he made to support it. They wrote summaries of it and rewrote-some as many as three times. We had conferences on their papers; those who had written good summaries explained their technique to others in the class.

Then we attacked the structure for a criticism of the article: finding the main points, deciding if you agreed with the author or disagreed on the basis of _his_ argument. We worked on development of the paper on the basis of experience or information students had that supported or contradicted the author's argument. Again, they wrote and rewrote, striving for clarity and coherence.

This was gruelling, but I feel it was necessary. Students simply had no idea what they were doing when they "summarized" or "evaluated." But three weeks were enough. We moved on to short stories and caught up with the other class by leaving out a couple of stories and spending only 1 day with _Death of a Salesman_.

So tomorrow we really get into poetry. I'd like them to pick a poet or a poem whose style they admire and use the form to express their own ideas. I'd also like to have one more critical paper from them before the quarter ends, perhaps a comparison paper (I taught the format for this when the Social Institutions teacher assigned such an essay). And maybe we'll have time to at least provide a forum for discussion of _The Autobiography of Malcolm X_ which I distributed, knowing the students wanted to read it, even if they didn't have time discuss it.

And maybe I'll find time to complete the mountains of paper work that have accumulated. And maybe I'll have moments for the rest of my life when I'll "evaluate" my experience, uncover more mistakes, linger over small successes. Oh, one success: When I told my class I wouldn't be here next year, one student asked, "Mrs. Fishman, you aren't gonna leave the brothers and sisters, are you?" I'll remember that.

FROM PUZZLES TO COMPUTERS

Huber Lamotte
Quanitative and Analytical Thinking
Southern University

Working with the Thirteen-College Curriculum Program has been a new and interesting experience for me. I didn't know exactly what I was going to do when I returned to Southern. I decided to use some puzzles by Whitman, Haynie and Colen. I couldn't have made a better choice. Never before has one of my classes started with such great interest and enthusiasm. Everyone got involved and several times I thought that I would have to separate students discussing different solutions to problems. This kind of participation was entirely new to me from a group of freshman students in college, many of whom had never been away from home before.

We moved from this into a study of sets. I used the units by Janie Jordan and Joe Colen. The units were sufficient and all of the basic ideas involving sets were treated. Using the physical models discussed in the units seemed to increase the students' understanding of abstract ideas.

In many instances we became involved with equations and it seemed logical to consider functions next. I used the unit Functions by Drake and others. The machine approach to the teaching of functions proved to be a very good approach. Previously, it has been difficult for me to get people to really understand the domain and range of functions. Students seemed to understand much better when these ideas are discussed from an input-output point of view.

I experienced some difficulty with this unit. Not from the function point of view, but rather from a background point of view. Some of the students had never worked with signed numbers. Most students could not perform basic operations with polynomials or solve linear equations.

In my opinion, these skills are necessary to a complete understanding of functions and much of the subsequent work. Because of this we had to leave the basic unit and try to develop skills in these areas.

This made me differ from some of the accepted philosophy of our group. Maybe it is true that there is no set course to follow at any particular school, but it is equally true, in my opinion, that there are some basic skills that students should possess at this level. A unit should be developed to determine and strengthem students' ability in the basic skills.

Several students came to me for help with physics problems. They were using the trigonometric functions to solve problems and they were not familiar with them. After talking with the Physics teacher, I thought it would be wise to consider the trigonometric functions, at least to the extent that they were being used. Therefore I extended the unit to include the basic trigonometric functions and the use of the slide rule.

I consider the most productive part of our work to have been with the computer terminal. I used the unit by Barnes and others. The unit seemed to have been designed for Fortram language. I am not familiar with this language so I had to develop other procedures. Students were required to become familiar with the parts and operation of the terminal and the Basic Language. One of the basic requirements was to 1) determine a problem, 2) write a program to solve the problem, and 3) successfully run the program.

After having done the basic work with the use of the computer, students were able to use the computer terminal anytime they were free to run programs. The majority of the students became skilled with the operation of the terminal and many of them learned to write simple programs. Interest was high and several students changed their major field to Computer Science.

I was at least pleased with the next project that we tried. Each student considered his major field and personal interests and decided upon the phases of mathematics that he wanted to study. They were to study the topic, write a paper explaining the ideas encountered and take a test on the topic.

I found that I had to provide help to all of the students. They were divided into similar interest groups and every morning I worked with several of the groups. Topics ranged from operations with signed numbers to the derivative of an algebraic function.

I never got to help some of the groups and a tremendous pile of paper work grew out of their research. I had to make and administer some eighteen different tests and administer them at different times.

Too much work was involved. I was not able to do all that I should have. I am not sure that the idea was a bad one. Maybe it was poor planning on my part. Lots of changes must be made if I try this procedure again.

One satisfying outcome of this effort was that some students worked hard and encountered much mathematics than I had expected to teach.

The year, in general, has been a rewarding one. Because of the atmosphere of the classroom and increased freedom students participated freely and I feel that many have shown an increase in mathematical maturity.

Several worthwhile outcomes came out of our work with the computer terminal. The University has a proposal with the Federal Government to operate terminals in the area. To this end, we took part in the following activities.

1. Demonstration of terminal to other departments in the university.

2. Demonstration of the terminal to members of the East Baton Rouge School Board.

3. Demonstration of terminal to teachers of Redemtorist High School. (One of the local private schools.)

4. Demonstration to Southern University, New Orleans, Xavier University and Dillard University in New Orleans, Louisiana.

WHAT WAS DIFFERENT FOR ME

Johnsie Jo Posey
Quantitative and Analytical Thinking
Southern University

"Why is your class different from all the other math classes which I ever attended?" This was the question one of my students asked me as he was leaving the room at the end of a class--about twenty-four weeks into the program. He had taken me a little by surprise, but I think I answered. "Well, this is an experimental program, and I suppose it is because I really try to do things differently." I wish I could remember his exact comment, and I don't, but it was something to the effect that he really liked the way the class was handled, and thought it was the shortest hour of the day. This young man is one of my better students, and I had sometimes felt that the material I taught was probably geared more to the average or less-than-average of my students. Apparently, this is not necessarily true, as this young man has exhibited a great deal of interest in every part of this course.

What do I do that is different? It isn't that I don't use a textbook, for in more than twenty years of teaching, I have never faithfully used a textbook but one time in my life. It isn't that I don't teach good mathematics, or college-level mathematics. The ideas that come up in my classroom could well be in order in any freshman mathematics course. So why do many of my students consider this class a radical change from others in which they have been enrolled? I think basically my own attitude toward the content of a freshman course has changed considerably, and that this perhaps has affected my students perhaps even more than I had realized.

Let me give you examples from a particular unit, the study of permutations, combinations, and elementary probability. I tried to make this unit graphic. We used colored cubes to represent flags on a ship, and girls talking on the telephone. When an answer to a problem was not obvious, we built the situation, people standing in line pretending to be waiting in the cafeteria line, or waiting to buy tickets at the movie theater, picking committees from a given number of couples, when both husband and wife could not serve on the same committee. Interesting discussions arose about whether an onion-cheese pizza was the same as a cheese-onion pizza, thereby giving different answers to the same problem, depending in fact on the individual students answer to the questions posed above. One of the things which I tried that was different for me; I gave the following problem which didn't fit any exact formula which the students had discovered at this time in the course. "Given the word equations, how many strings of five letters can you make, using the letters of this word, if you are always to use three vowels, and two consonants. (No letter may be repeated in any given string.) (This problem can best be solved, in my opinion, by using both permutations and combinations.) My instructions to the class were that each student was to try to work this problem alone, but when he had arrived at a solution, he was to wander around the room, comparing answers with others who had finished. In case they did not agree on the answer, each was to try to convince the other that 'his' answer was correct. At the end of the 'discussion,' I would take only one answer from the entire class, or in other words, they had to reach an agreement on what they considered the correct answer. I listened very closely. I know for a positive fact that no one student had the correct answer on the first try. Many conversations went something like this: "You can't do that! See, that won't work. Let me show you." "Well, I know your answer is wrong, but I see where I made my mistake; let me work on it for a few minutes," etc. By the end of the period the class had agreed on the answer, and was ready to defend it. Not only that, it was the correct answer. I felt this was one of the most successful class periods of my entire teaching career.

A second thing which I did, which was again different for me: I gave a test on probability which consisted of the following problem. Construct for yourself a situation which can be set up as a finite sample space of at least twelve points. Ask and answer as many different probability problems as you can about this sample space. I remarked that creativity would carry some grading weight, and that if the problem which the student 'made up' was a strict regurgitation of some problem which we had studied in class, it would not be considered as good as one which was more original, but that it of course would be acceptable. One of my poorest students created a sample space, which was simple, but which was absolutely unlike any which we had done. He asked good questions and received a very good grade. (He also answered his questions.) It is not at all strange, considering that when we first started discussing this unit, he had made the statement, "I like this kind of mathematics. It's better than anything we have done."

Of course, other students have liked other units, but I sincerely feel there has been something for all.

I asked my students to write some kind of a comment about how they felt about the mathematics course. This was strictly voluntary, and I did receive a few papers, all of which I have copied in their exact form, spelling errors, grammatical errors, and all. I specifically told them I was not asking, and did not want, their opinion of me as a teacher, but that I was interested only in their reaction to the course. However, you will notice, I might as well not have made this stipulation. Like all students, their feelings for the course are all tied up with their reactions to the professor. I also stipulated they were to sign their name only if they wanted to.

Some Student Responses

I feel that the course, so far, is very rewarding. It goes well with most of the students too, I think. I enjoy working with Mrs. Posey, she adds very much to the class. I find that the way Mrs. Posey brings to us a new chapter in math, very effective, interesting, it gives us a tangable picture, before we put it into words and numbers and figures. Then by putting them together we can see a pattern and there we have a very simple and not complex solution to the problem. I think it is very much equal to the regular courses of math 110 and 111. I might even say it is better. From the past experiences in the class, I feel all information learned will be to my benefit, in courses of math. I will take in the future.

Student A

I have really and still am enjoying the course. I learned many strange things and got new ideas of which I had never known before just by using simple mathematical equations and equipments. I never knew that such easy seeming problems could become so complicated. My complimetns to our teacher Mrs. Posey and I sincerely hope that next year with all the good luck in the world she is still one of our top "mathematical Analytical Thinking" teachers. One never learns enough there are always new and exciting ideas happening daily.

Student B

I have found the course very unique and different from any other math class that I have attended. The course and method seems to be of lasting value. What I mean is that the things we do are different, just simple adding, multipling, dividing, and subtracting is something that almost anyone can master. Some of the things in ordinary math will soon become obsolete, as has things before.

Student C

I like the mathematics class in the thirteen colleges. I think it was a new and different experience from me. The class helped me to do some things which I had never thought was possible. The class gave us an opportunity to experiment to find the answers, rather than just following a certain formula or equation. I think the class was just great.

Student D
(a very good student)

In comparing this course with my previous course in math, I found it making me apart of it.

For the first time I became involved with numbers. When I work a solution to a problem I honestly feel that "I did that." Anyone if he puts his mind to it can memorize a formula but he will forget it, but if he finds his own way and work up a formula he never forgets it. It's hard to forget something you created.

Student E

When I first entered my math class I had a negative attitude. I thought that everything was going to be hard. I had made up my mind just to be a poor student because I always hated math.

When the class started I just that was the end for me. At first it seemed complicated but then it seemed interesting. If it became too complicated their was help for you. I couldn't believe that I was really enjoying math for the first time. I began to enjoy my class more and more. Sometimes I knew why things would seem hard because I would put my head into it.

I must say up to now I have enjoyed my math class. I don't think that we have wasted our time on foolishness. I feel that the work we've done has been most interesting. I have had a chance to really learn a lot of new things and a lot of exciting ways in finding them. If I came in with a negative attitude and now I enjoy it; it has been and enjoyable and helpful class to me.

Student F.

(Student F really told the truth about intending to be a poor student. I really though she was going to be my poorest, or next to the poorest student--I've been trying for sometime to figure out in my own mind what had happened to her and when, because she seemingly blossomed out in my class almost overnight, and while she is not one of my best students, she is certainly more than average, and I am so happy I asked my students to write a few sentences for me voluntarily, because I felt this paper was a treat.)

White teacher in a black school

The question I am most often asked is, "What is it like to be a white teacher in a predominantly black school?" I assume that you too would like the answer to this question. First of all, this question always comes to me as a complete shock. I never think of myself as being in a different position from that of any other mathematics teacher, and I never think about what 'it's like to teach in a black school.' It seems to bother my friends, my non-friends, acquaintances, and casual strangers that I say that I cannot tell the difference in my classes at Southern University, and those of any other school in which I have taught, segregated, integrated, big or small. These people keep telling me, 'but they are different, and you should recognize these differences, and teach accordingly.' These differences of which people speak are not the same differences which I recognize, such as I have good students, poor students, poorly prepared students, motivated students, and in fact, any kind of student you can name, but these differences have been apparent in every ordinary mathematics class which I have ever taught, and I can find no other differences. There are certainly not racial differences, nor socioeconomic differences; they are people differences. and it is to this to which I teach, and it is this which I think the Thirteen College Curriculum materials has enabled me to do a better job of doing---.

What is "necessary" mathematics?

The remaining question to be answered then seems to me to be, "How has the curriculum material affected me, or how has Thirteen College Program teaching changed me as a teacher. I think most of all my attitude has changed toward what is "necessary" mathematics. I firmly believe there is no one course of study for freshman mathematics which is suitable for all mathematics courses. I still believe in a rigorous course of pure theory for the math major, but my attitude toward a general course has been severely altered. I do not believe there is any one area, or unit, which cannot be omitted from a freshman course, without handicapping the student. I believe each teacher has to have the knowledge and nerve to teach to each of his classes those parts of mathematics which he thinks will be most valuable to that particular class. So many textbooks suggest that there is only one basic way to teach each particular skill in each unit. Textbook writers are not necessarily the best teachers, and not even necessarily the best mathematicians. In many instances they are simply required to publish, or die. I do not believe that content, as such, plays any important part in any general mathematics course. I am not at all sure that any part of the content of my course will ever be used in context by my students.

So why should I teach mathematics at all? There are many side-products to a well taught course, and content is not necessarily one of them. I hope that my students will be better able to analyze new situations, and to act with more confidence to solutions of their everyday problems. Maybe they can even realize that there is not always a single correct way to solve a problem; maybe no one knows the answers to some problems; maybe getting wrong answers sometimes teaches more than getting right answers.

Many years ago, I had a very brilliant class in a high school geometry course. One of my best students was however not very fond of the geometry, and asked, "Why should I take this course when I intend to major in english?" My answer was to this effect, you will find that this course will help you to be a better English student, and I firmly believe that you will be able to write better themes, and as a result, it will help your grades in English. He replied that he always made A's in English anyway, so what good would that do? Several weeks later, the same student arrived in my class with a stunned look on his face and handed me his latest English theme, graded and returned to him by his teacher. Across the top was the following note, "I know you have always made A's in this class, but this theme is so far superior to anything you have every turned in to me that I have to comment on it. The organization of the material shows a maturity that I did not believe possible for you as a high school student." His comment to me, "I didn't believe you, but it must have been true."

I hope (and believe) that this is the type of results or reactions we will receive from our Thirteen College Curriculum material. It surely will not be so dramatic as this example in most instances. I do not believe that the content of my course will stay with these students any moreso than when the content is taught in the regular courses; I think it is relatively unimportant what I teach, but I do believe that how I teach is very important, and that the results that I get will play an important part in the lives of the students that I work with. I do not mean to imply that I am willing to accept the credit or the blame for the future education of my many varied students, but I do believe that I will have made a favorable impact on their search for a way to solve their problems, be they mathematical or humanitarian.

FIVE UNITS ON SOCIAL INSTITUTIONS

Edward Rice
Social Institutions
Bishop College

TITLE OF UNIT: Education (Covert Methods of Social Control)

Number of Class Sessions on Topic: 20 (five per week)

Dates Begun and Completed: September 1, 1969--September 26, 1969

What was this particular unit intended to do?

The sources for this unit were the original Education Unit developed at the 1967 summer conference at Pine Manor and the unit on Covert Social Control (of which education was an integral part) developed at the 1969 summer conference at Pine Manor.

The main purpose of placing this unit at the beginning of the social science course was to introduce the students to the educational philosophies of the 13 Colleges Program. As such it was designed to give the students an understanding of the rationale behind the "inductive" method of investigation, i.e. the lack of formal lecturing and reliance upon the teacher as the ultimate source of information, and instead the emphasis upon classroom discussions. It was also to show the rationale behind the use of materials and unit topics in social science which were relevant to the students' interests. The students' reading of Summerhill facilitated discussions along the above lines.

A second purpose of the unit was to examine the American education institutions and systems as methods of covert social control. We were primarily interested in seeing how the educational system was designed to keep lower class students and/or students from certain minorities in those educational tracks which would equip them for low economic positions and exclude them from more prestigious positions. At the same time this aspect of the unit introduced students to comparative educational systems (particularly that of the Soviet Union). As such the students gained an understanding of the interrelationship between the economic system and the educational systems in various countries. The students' reading of Education for Alienation facilitated discussions along these lines.

A final purpose of the unit was to provide a transition from the Education unit to the Family unit. This was facilitated by reading the remaining parts of Summerhill which introduced the students to various theories of child psychology.

Outline of Unit Topics:

1. Various educational theories: inductive, student-centered approach.
2. Classroom procedure to be followed at Bishop: large and small discussions, lectures; determination of grades, student participation in the grading.
3. The Summerhill School: theory and practice.

4. Economic discrimination in the United States.
5. The educational basis of economic discrimination: IQ tests, reading groups, attitudes of teachers, subject matter taught, etc.
6. Comparative educational systems.
7. Corrective solutions.
8. Child development: child rearing, sex, religion and morals, children's problems, and parents problems.

MATERIALS

What were the basic readings required of students?

1. A.S. Neill, Summerhill: A Radical Approach to Child Rearing, (New York: Hart, 1960), $1.95. Ten copies were placed on reserve. This book was very effective. The students had no difficulty in reading it. And the radical notions on education greatly stimulated classroom discussion. It was very good for leading students into discussions of the educational theories of the 13 Colleges Program. One of the difficulties with the book is that often Neill's ideas are too one-sided. Students should be exposed to other theories of education and child development perhaps through the additional use of B.F. Skinner's Walden Two. I used this book effectively before in 1967, and I would like to use it again although perhaps supplemented by other works.

2. Nathaniel Hickerson, Education for Alienation (Englewood Cliffs, New Jersey. Prentice Hall, 1966), $2.50. Students were given individual copies of this book. After discussing it, they were asked to write a six to twelve-page essay on one of the key concepts in the book. The students had little difficulty in reading the book, although they comprehended the author's main points better when they came to write the essay than in their initial reading designed for classroom discussion. The book is a seminal work, and I know of no other single work which conveys the same information. The book is short and condenses many complex theories. The teacher should prepare himself by reading an assortment of related material.

List supplementary materials to which students referred.

No other works were required of the students, since this was designed as a short introductory unit. Nevertheless student interest was greatly excited by this unit, and they wanted to examine many points more fully. Therefore in the future I recommend that the teacher make available other works taken from the teacher's list.

List the resource or reference material for the teacher.

1. Neil Postman and Charles Weingartner, Teaching as a Subversive Activity, Delacorte Press, $5.95. This recent work gives a very good understanding of the philosophies behind several radical theories of education.
2. Jack Zevin and Byron G. Massiales, Creative Encounters in the Classroom, John Wiley. This work offers a multitude of concrete classroom situations in various courses employing the inductive approach.
3. Jonathan Kozol, Death at an Early Age.
4. John Holt, How Children Fail.
5. Herbert Kohl, Thirty-six Children.

6. Sylvia Ashton-Warner, Teacher.
7. Paul Goodman, Growing Up Absurd.
8. Maria Montessori, The Montessori Method.
9. Jerome Bruner, The Process of Education.

No other materials or aids were used in the classroom. The reduced budget for this year precluded the use of movies.

List and describe all class activities engaged in as part of the study of this unit:

No lectures were employed in this unit. The role of the teacher was deliberately kept to a minimum. Instead various types of classroom discussions were used. The chairs in the classroom were arranged in a circle. The most common method of discussions were those led by panels of five students. (The class was divided into five groups of five students each). The groups were to prepare questions to ask the other students on sections of the required reading. In general the students were asked to prepare questions in their notebooks on the material they read rather than to take summary notes. Hence the emphasis was on the student's ability to pose questions rather than to recite information. The teacher controlled the discussions and from time to time posed questions of his own. This method was very effective in getting the maximum amount of classroom participation. Moreover it helped to let the teacher into what the students were thinking instead of concentrating only on what he wanted to impart to his students. Thus the classroom discussions often went into unpredictable areas.

For the future it is highly recommended that the students be taken to observe a school which is run along the Montessori or Summerhill philosophies.

There were some difficulties with the classroom discussions. Sometimes the students did not prepare questions except on the materials on which their particular group was supposed to lead the panel discussion. In a later unit this problem was alleviated by not appointing panels until the very day of the discussion. The discussions only rarely developed into bull sessions, but the students did often become bored with conducting their own discussions. The number of weekly class meetings (5) contributed to this problem. The problem was partially alleviated by requiring only one class group of five appear on Fridays. It might also help if the teacher were to give one lecture a week on information which was not readily available to the students.

What means of follow-up is being used--tests, oral presentations, writing, etc?

The students were asked to write a six-to-twelve page essay examining a quotation from Education for Alienation. Through this exercise the students were asked in effect to analyze several of the major arguments in the book and to provide their own critical comments on these arguments. Since many of the students had had very little exercise in writing essays, very detailed instructions were given for the writing of this initial essay. The instructions would become much less detailed for essays written on successive units.

The teacher was very pleased with the resulting essays. There was marked improvement over the initial essays of the previous year when very little instructions were given. The essays revealed that the overwhelming number of students were able to comprehend the main arguments in the book. Moreover they showed that most of the students were able to write lengthy essays at the beginning of the year, although many students relied too heavily on quotations taken from the book and not enough on their own ideas.

No single examination was given on this unit, although questions concerning Summerhill appeared on the mid-term examination which was mostly devoted to the Family unit.

Evaluation of topic

It is unfortunate that the CRG summer conferences have not devoted some attention to the educational theories which are implicit in the program. It would seem appropriate that the summer conferences devote a seminar towards explicating the philosophies behind the program. For the most part the teachers have had to come to an understanding of these philosophies on their own.

For the most part, however, this unit achieved the very limited objectives that were set out for it. Because of the appearance of this unit early in the year, the students seemed to better understand the working philosophies of the program. Thus they were better able to accept a reliance on their own insights rather than merely on the information of the teacher given through lectures. All this contrasted with the situation of the previous year when the teacher neglected to include a unit of this nature at the beginning of the school year. At that time the students found themselves wandering aimlessly without fully grasping the rationale behind the program. Moreover the teacher last year was forced to rely too heavily on lectures rather than allowing the students to take the reins for themselves in group discussions.

An important practical consequence of the use of this unit was that the students in conjunction with the teacher determined the type of grading system that would be used during the semester. It was agreed that the teacher would provide half of the semester grade based on the tests and written essays. For one fourth of the grade the students graded themselves. And for another fourth each student graded every other member of the class. It was felt that only through this three-way evaluation could a truly reasonable grade be determined. (It should be added that the teacher was for the most part quite satisfied with the way the grades were determined at the end of the semester. Many of his particular biases towards specific students were overcome by the broader judgment of the class. Generally the system rewarded the better students more than the poorer ones. However, it is the opinion of the teacher that the students were better in assessing their own grade than those of their colleagues. Nevertheless the teacher intends to employ the same system for the next semester, the only change being that it not apply to students who have made only D's or F's on the tests and written assignments.)

The main difficulty with this unit is that it did not achieve many of the potential objectives that could have been set out for it. Part of this is a failure of the summer conferences as pointed out above. Another reason is that educational psychology is not part of the expertise of this particular teacher. In any event the students opened up many more avenues than were able to be explored considering these limitations. In fact freshmen students in social science seem to be much more greatly interested in exploring psychological theories, both as apply to education and child development, than they are interested in exploring historical, political scientific or sociological issues.

TITLE OF UNIT: The Family (The Basis of Society)

Number of Class Sessions on Topic: 20 (five per week)

Dates Begun and Completed: September 29-October 24, 1970

Note: There was no formal beginning or end to this unit. Summerhill provided the transition from the unit on Education to the one on the Family. From theories of education we moved to theories of child development and thence to the family. Likewise Tally's Corner provided the transition from the unit on the Family to that on Negro History and Culture. From a discussion of the family in various cultures we moved to a specific consideration of the Negro family and thence to the life of the Negro streetcorner men.

What was this particular unit intended to do?

The main focus of this unit was an examination of the family in various cultures, with specific emphasis being given to the development of the American family and the types and development of the black family. We first examined the family in various cultures: the Toda, the Baganda, the Hopi, the Classical Chinese, the Kibbutz, colonial American and modern American. Then we specifically examined the black family starting with the nature of the Negro family in Africa, examining the impact of slavery on the Negro family, and concluding with the different types of black families which have emerged in modern America: the matriarchal, the patriarchal, the middle-class sexually equal family,and the fatherless matri-focal ghetto family. The last type of black family introduced Tally's Corner.

In a broader sense this unit was supposed to introduce the student to the basis of community and society and to the basic social institutions. The specific emphasis here was on the family as the elementary social institution. The family, more so than any other single institution, is a microcosm of society. As such it served as a convenient case for illuminating and illustrating some general things about the nature of man and society. For example, as a microcosm of society, the family is seen to be concerned with Procreation; power and authority, stratification, distribution, and the transmission of values and norms through socialization.

Finally two other specific purposes were fulfilled by this unit. One was to introduce the students to cultural anthropology. They gained an understanding of the diversity of families in various cultures and learned that, as far as the family and the role of the sexes was concerned, there was some similarity but much diversity. Secondly they gained an introduction to black history and culture through the study of the development of the Negro family.

Outline of Topic Points:

1. The Polyandrous Toda Family
2. The Matrileneal Hopi Family
3. The Polygynous Baganda Family
4. The Classical Chinese Family
5. The Family of the Kibbutz
6. The Colonial Family in North America

7. The Transitional American Family
8. The African Family
9. The Slave Family
10. The Matriarchal Negro Family
11. The Patriarchal Negro Family
12. The Middle Class Sexually Equal Negro Family
13. The Father-Absent Matri-focal Negro Ghetto Family
14. Family Structure and Cycle
15. Socialization of the Family: Controls and Functions
16. The Historical Development of the Family
17. The Economic Basis of the Family
18. Effects of Modernization on the Role and Structure of Families.
19. Child Development

MATERIALS

What were the basic readings required of the students?

1. A. S. Neill, Summerhill: A Radical Approach to Child Rearing, (New York: Hart, 1960). See the report on this book in the report on the Education unit. Its use in this unit was to give the students an introduction to certain theories of child development.

2. Stuart A. Queen and Robert W. Habenstein, The Family in Various Cultures, third edition, (Philadelphia: J.B. Lippincott, 1967). Ten copies of this book were placed on reserve. This book has been highly recommended at each of the three summer conferences, and it well deserves its praise. The main value of this book is that it is a good introduction to cultural anthropology, and the students are usually very much intrigued by the study of certain exotic families. Moreover it introduces the student to certain sophisticated sociological concepts and terminology. There are drawbacks, however, to the book. The main difficulty the students found with it was its mass of detail. Often they confused information which applied to particular families for other families.

3. E. Franklin Frazier, The Negro Family in the United States, revised and abridged edition, (Chicago: University of Chicago, 1966). Ten copies of this book were placed on reserve. Only parts of this book were stressed, i.e., those parts dealing with the slave family. Other parts were summarized by the instructor for the benefit of the students. For gaining some understanding of the nature of slavery and its impact on the Negro family, this book is adequate. However much of the author's treatment of the modern Negro family has been superceded by more recent studies which the instructor was aware of.

4. Elliot Liebow, Tally's Corner, A Study of Negro Streetcorner Men, (Boston: Little, Brown, 1967). Students had individual copies of this book. Besides the Autobiography of Malcolm X, this was the best loved book of the entire semester. For the purposes of this unit it was particularly good for gaining an understanding of the economic bases of the family and for gaining insights into the types of familial arrangements which exist in the Negro ghetto. (For additional comments see this instructor's report on the unit on Black History and Culture.)

List supplementary materials to which students referred.

It would be very useful in this unit to assign individual sociological articles on the family and the make-up of society. Many such articles, like Lee Rainwater's "The Crucible of Identity," are contained in Meier and Rudwick's The Making of Black America. But copies of this book arrived too late to be of use in this unit.

List the resource and reference material for the teacher.

1. Andrew Billingsley, Black Families in White America, (Englewood Cliffs, New Jersey: Prentice-Hall, 1968), $2.45. I would recommend this as a basic student reading in the future, particularly in preference to Frazier.
2. William J. Goode, The Family and Readings on the Family and Society.
3. Oscar Lewis, Five Families.
4. Daniel Patrick Moynihan, "Employment, Income and the Ordeal of the Negro Family," Parsons and Clark, The Negro American.
5. Lee Rainwater, "Crucible of Identity: The Negro Lower-Class Family," also in Parsons and Clark. There are also other articles in this anthology.
6. Thomas F. Pettigrew, A Profile of the Negro American.
7. Other relevant articles are to be found in August Meier and Elliott Rudwick, The Making of Black America, Vol. II.

No other materials or aids were used in the classroom. The reduced budget for this year precluded the use of movies.

List and describe all class activities engaged in as part of the study of this unit:

No lectures were employed in this unit. The role of the teacher was deliberately kept to a minimum. Instead various types of classroom discussions were used. The chairs in the classroom were arranged in a circle. The most common method of discussions were those led by panels of five students. (The class was divided into five groups of five students). The groups were to prepare questions to ask the other students on sections of the required reading. Another technique was that a particular grop was asked to defend a particular family as the ideal type. This produced some interesting discussions. However, it was also found that the division of the reading material in this way had a drawback in that many of the other students did not prepare the readings unless they had been specifically assigned. This difficulty was partially circumvented by not assigning groups beforehand but only during the class session.

In any event the emphasis on the class discussions was on the students' ability to pose questions rather than to recite information. The teacher controlled the discussions and from time to time posed questions of his own. This method was very effective in getting the maximum amount of classroom participation. Moreover it helped to let the teacher into what the students were thinking instead of concentrating only on what he wanted to impart to the students. Thus the classroom discussions often went into unpredictable areas. In the future I think it would be appropriate for the teacher to prepare an occasional lecture on material which is not readily available to the students.

What means of follow-up is being used--tests, oral presentations, writing, etc?

An essay and identification examination was given to the students on the Family unit. A question was included on Summerhill. In preparation for the examination the teacher provided a list of some thirty identification and twenty-seven essay questions. This facilitated the review of the students. The students were told that the examination questions would be taken from this preparatory list with only some minor modifications. The purpose behind this technique was that the teacher wanted the students to learn some particular types of information and types of social science analysis. He was not interested in preparing a test simply to find out what the students already knew. This technique has proved effective in the past, and I would use it in the future. However the students should be encouraged to prepare their own review question for at least one examination during the year, and the teacher would prepare the examination from the students' questions. Furthermore on at least one examination the students should prepare their own review and the students should answer questions entirely of the teacher's making.

Besides the examination on the Family the students were asked to write a ten to twelve-page essay centering around one of four concluding quotations taken from Tally's Corner. This was also used for the unit on Negro History and Culture. The resulting essays were good but did not show marked improvement over the first essay in the semester which, itself, had been much in advance of the usual first essays in the TCCP Program.

Evaluation of Topic

The Family unit has received some of the most consistent attention at each of the TCCP summer conferences. It has been agreed by almost all teachers that it should be included somewhere in the yearly social science curriculum. However student evaluations at the end of the semester indicated that, with the exception of Tally's Corner which was the most popular book of the semester, the students were not greatly interested in the Family unit. They much preferred the units on Education and Black History and Culture.

Another difficulty of the unit was that sociology and anthropology do not fall within the expertise of this particular instructor. His knowledge of scholarly work on the Family is limited. There was very little additional information that he could lecture about. Nevertheless he is inclined to use this unit again but only for a short duration.

TITLE OF UNIT: Black History and Culture (The Black Experience)

Number of Class Sessions on Topic: 35 (five per week)

Dates Begun and Completed: October 27, 1969--December 12, 1969

What was this particular unit intended to do?

The sources for this unit were generally the variety of units developed on Black history and the Black Experience at each of the three summer conferences, particularly the last one. More specifically this instructor drew upon and enlarged on units on Negro Political Leadership which he had taught during the first two years of the program.

The focus of this unit was on the Black experience since the time of slavery and particularly during the twentieth century. As such it began with the response to the rise of Jim Crowism at the end of the last century and continued until the civil rights struggles of the 1950's and 1960's. The unit centered on the political, social, educational and economic strategy of several key Negro leaders during the twentieth century. These included Booker T. Washington, W.E.B. DuBois, Marcus Garvey, A. Philip Randolph, Robert F. Williams, Malcolm X and Martin Luther King. Also included were the strategies and goals of several civil rights organizations: the NAACP, CORE, the Urban League, SCLC, and SNCC. One of the main themes of the unit was the positioning of these men and movements on the spectrum from integrationism to separatism.

Still another focus of this unit was the social and economic situation of black people in the 1960's and what can broadly be called black culture.

OUTLINE OF UNIT TOPICS:

1. The Rise of Jim Crow.
2. Booker T. Washington and Accommodation to Segregation.
3. W.E.B. DuBois and other critics of Washington: the Rise of a New Radicalism.
4. The Impact of the Migration to the North and World War I on the Negro
5. Marcus Garvey and Black Separatism
6. Black Socialism: A. Philip Randolph and DuBois
7. The Student Non-Violent Coordinating Committee: Early and Recent
8. The Black Muslims, Malcolm X and Neo-Separatism
9. Robert F. Williams and the Call to Violence
10. The Conservative Response: the Urban League and the NAACP.
11. Martin Luther King, Jr., and SCLC
12. The Social and Economic Situation of Blacks in the 1960's.

MATERIALS

What were the basic readings required of students?

1. Elliot Liebow, Tally's Corner, A Study of Negro Streetcorner Men, (Boston: Little, Brown, 1967). Students had individual copies of this book. Along with the Autobiography of Malcolm X, this was the basic source of information on black ghetto life in the 1960's. It was the most popular book of the semester.

2. Malcolm X, with the assistance of Alex Haley, The Autobiography of Malcolm X, (New York: Grove Press, 1966). Students had individual copies of this book. This was one of the outstanding books used in the social science curriculum during the past three years. Seldom were specific reading assignments made on this book. It was correctly assumed that the majority of students would read this book on their own initiative. However some of the students later complained that we had not devoted enough time to a discussion of this book.

3. Francis L. Broderick and August Meier, editors, Negro Protest Thought in the Twentieth Century, (Indianapolis: Bobbs-Merrill, 1965). Ten copies of this book were placed on reserve. The students were asked to read about three-fourths of the documents in this anthology. This instructor considers

the reading of some documents very important for the students to grasp the full meaning of historiography. However most of the students found them very boring and difficult to understand because they were taken out of context of a story. I do not know how to rectify this situation except to have the students also read more about the background of the documents in Bennett or Franklin. It is also important for the instructor to go over in class some of the documents; this facilitated student comprehension.

4. Charles E. Silberman, Crisis in Black and White, (New York: Random House Vintage Book, 1964). The instructor still considers this to be one of the best surveys of the development of American racial problems. It summarizes a great deal of scholarly work. However the students almost never mentioned the book in their evaluations of the semester. Thus the instructor does not know whether the students liked it or not. Perhaps some of the students did not finish this reading assignment, since this was the last book of the semester. However it was apparent from their final exams that many had read at least parts of it. Ten copies were placed on reserve.

List supplementary materials to which students referred:

No other works were required of the students. Nevertheless many students on their own initiative made use of some of the materials in the Library's new collection of paperbacks on Black History. One student prepared a report on Marcus Garvey.

List the resource or reference material for the teacher:

N.B. Only the most important materials are listed here.

1. C. Vann Woodward, The Strange Career of Jim Crow.
2. Francis L. Broderick, W.E.B. DuBois: Negro Leader in a Time of Crisis.
3. E. David Cronon, Black Moses, the Story of Marcus Garvey and the Universal Negro Improvement Association.
4. W.J.Cash, The Mind of the South.
5. John Hope Franklin, From Slavery to Freedom.
6. Howard Brotz, editor, Negro Social and Political Thought, 1850-1920.
7. E. Franklin Frazier, Black Bourgeoisie.
8. Booker T. Washington, Up From Slavery.

9.& 10. W.E.B. DuBois, The Soul of Black Folks and The Autobiography of W.E.B. DuBois.

11. August Meier and Elliott Rudwick, The Making of Black America, Vol. II.
12. Louis Lomax, The Negro Revolt.
13. Dan Wakefield, Revolt in the South.
14. Howard Zinn, SNCC, The New Abolitionists.
15. C. Eric Lincoln, The Black Muslims.
16. Arthur I. Waskow, From Race Riot to Sit-In, 1919 and the 1960's.
17. Otto Kerner, chairman, Report of the National Advisory Commission on Civil Disorders.

Did you use film to supplement the teaching of this topic? Yes.

CBS "Profiles in Courage" Series: Frederick Douglass.
The reduced budget for this year precluded the use of additional movies.

List and describe all class activities engaged in as part of the study of this unit:

The prevailing class activity was the use of classroom discussions which, in this unit, were almost always led by the teacher. We held a debate on the Washington-DuBois controversy. Also several groups of students were asked to report on the goals and strategies of various civil rights organizations. Furthermore in this unit the instructor resorted to some lectures on material that was not readily accessible to the students. The students seemed to enjoy this, but they preferred that lectures be kept to one or two per week.

What means of follow-up is being used--tests, oral presentations, writing, etc?

As was noted above we held a debate, one student and several groups of students presented oral reports. The students also wrote an extensive essay on Tally's Corner (which was noted in the report on the Family unit.) The main method of testing in this unit was the final examination which was devoted entirely to this unit. In preparation for this the students were given a list of identifications and essay questions for review. The examination was taken from this review list with only minor modifications. A few students did very well on this examination, but the majority of the students performed below the expectations of the instructor. One of the difficulties the students complained of was that copies of two of the books were kept on reserve, and the students did not always find copies available.

In the student evaluations of the first semester, the unit on the Black Experience ranked as the most popular and most interesting. (The unit on Education was a close second; and the unit on the Family was favored much less than the other two.) The students feel that at least one half of the social science curriculum should be devoted to the Black Experience; some are in favor of more attention. They find this topic both interesting and very relevant. But some suggested that we use other approaches to this topic, since many of the students did not particularly like some of the books. One suggestion is that we try the biographical or autobiographical approach, covering such men as Douglass, Washington, DuBois, Garvey, Malcolm X, Claude Brown, and King.

Evaluation of Topic:

The Black Experience certainly has to serve as one of the central units of the social science curriculum. Its interest and relevance to the students cannot be overstated. However the wealth of material is so great that the instructor's discretion in selecting material becomes very important. This instructor feels most comfortable with the approach which emphasizes personalities and movements and political and historical issues. His approach has stressed the varieties of personalities who have exercised black political leadership and the varieties of goals and strategies which the different protest groups have advocated. Even by restricting himself to these themes, there is always more and more reading for the instructor to do. And he would like to continue to develop this unit in this way in the future.

TITLE OF UNIT: Slavery (The Black Experience)

Number of Class Sessions on Topic: 40 (five per week)

Dates begun and completed: January 19-March 18, 1970

What was this particular topic intended to do?

The idea of developing a unit on slavery was first proposed at the 1967 summer conference. But nothing was done at the time. At the 1968 summer conference at Tufts, this instructor, on his own initiative, began to develop a unit on slavery as the first part of a semester's course on the black experience. During that year, particularly at a writing conference held in New Orleans in January, the use of this unit was encouraged and developed by Francis Mark and John Reggy who wanted to incorporate a treatment of slavery in their general schema on Modernization. Slavery was seen as one of the transitional phases in the transition from a primitive society to a modern one. Finally at the summer conference of 1969 full attention was given to the development of a unit on slavery as one of the two main units to be devoted to the black experience. A committee of eight people, including this instructor, worked on the unit.

As early as 1967 Conrad Snowden conceived of slavery as an ideal social science unit to be studied. His rationale was that it dealt with a single social institution which easily lent itself to consideration from various disciplines in social science: history, psychology, and economics as well as sociology, anthropology and political science. As such it is an ideal interdisciplinary unit for the social sciences. Further work with the unit found that it could be related to different sequences such as the black experience, modernization, and cross-cultural sequences. As such it proved to be a very flexible unit.

Outline of Unit Topics:

1. Historiography of slavery--its treatment by various American scholars from abolitionist times to the present. Emphasis was placed on Ulrich B. Philips, Kenneth M. Stampp, Stanley Elkins and Eugene Genovese.
2. The "myth of the African past"--African civilization at the time of the beginning of the slave trade.
3. The Slave Trade--the triangular trade system and the roots of the British Industrial Revolution.
4. The Origins of Slavery--race prejudice or economic necessity? Also a consideration of African slavery.
5. A comparison of slavery in Latin America with that in North America.
6. Plantation Slavery--comparison with slavery on small farms.
7. Slavery in the cities.
8. Slave revolts and insurrections.
9. Elkins' theory of the personality problems arising from slavery--joined with Genovese's assessment of the personality of the slaveholders.
10. The position of quasi-free Negroes in the North and South at the time of slavery.
11. The Abolitionist movements (black and white) and opposition to slavery.
12. The political Economy of Slavery.

13. Slavery as a cause of the American Civil War.
14. Immediate problems of emancipation--comparison here with Latin America.
15. Ex-slaves view of slavery.

MATERIALS

What were the basic readings required of students?

1. Lerone Bennett, Jr., Before the Mayflower. This book is a must in any unit dealing with the black experience. Although it is not the most scholarly, it is very readable and popular with the students. In this unit the chapters dealing with the African past, slave revolts and the conditions of slavery were used.

2. B.A. Botkin, editor, Lay My Burden Down, A Folk History of Slavery. This is a first-hand account of the stories, attitudes and reflections of former slaves as taken down in the 1930's. Students were encouraged to read selections from throughout the book, but they were only required to read the selection "Long Remembrance," pp. 61-138. The students received the book warmly, found it easy to read, and welcomed the chance to read the first-hand accounts of the slaves themselves. Many of the students were surprised that the attitude of some of the slaves was not as hostile to the slave masters and to the conditions of slavery as they thought would be the case.

3. Leslie Fishel and Benjamin Quarles, The Negro American: A Documentary History. Students were asked to read all the chapters in the first part of the book except the one dealing with the Revolutionary War. However, the use of this book was less successful than it was last year. One reason was that less emphasis was placed on the book in class discussions than last year. A more important reason is that the students found the reading of documents very difficult. There were only a handful of students who praised the use of documents. The students generally preferred Bennett as a basic text for this unit. I would like to use Fishel and Quarles again and to expose the students to some documents but not as extensively as this year.

4. Eugene D. Geneovese, The Political Economy of Slavery. This is a most difficult book for freshmen to read. Finally they were asked to read only the first and last chapters of the book. Lectures explaining the chief points of the book were welcomed by the students. Despite the difficulties in reading this book, students who answered the question dealing with this book on the examination did surprisingly well and showed that they were capable of grasping some very sophisticated points. In the future I would continue to use this book for lectures and assign the first and last chapters for the better students.

5. Kenneth M. Stampp, The Peculiar Institution. All the chapters except the last one dealing with the economics of slavery (the conclusions of which are very outdated) were assigned. The students found it easy to read, although repetitious, and they generally liked the book. However not too much emphasis was placed on it in class discussions. It is the best general description of plantation slavery.

6. Allen Weinstein and Frank Otto Gatell, editors, American Negro Slavery. This is a collection of extracts from scholarly articles and books dealing

with various aspects of slavery. I assigned only those readings which came from works which I was lecturing on. They were to help students who might have been confused by the lectures. Only a few students took advantage of these readings but they found them helpful. I would use this book in the same way in the future, although there is a similar work now out by Genovese.

List supplementary materials to which the students referred:

No other works were required of the students. However a few students, on their own initiative, examined books in the new "black history" section of the library.

List the resource or reference material for the teacher:

Here I will list only the more important books.

1. Stanley M. Elkins, Slavery, A Problem in American Institutional and Intellectual Life. This served as the basis for several lectures on the historiography of slavery and on the personality problems associated with slavery. I ignored the section on abolitionist intellectuals. The students gained an adequate grasp of the essential arguments that slavery produced a "Sambo" personality in some plantation slaves.

2. Eric Williams, Capitalism and Slavery. This served as the basis for a few lectures on the economic origins of slavery, slavery and the triangular trade system, slavery as the basis of the British Industrial Revolution, and economic considerations in the abolition of slavery. The students had little difficulty in graspoing these topics.

3. Richard C. Wade, Slavery in the Cities. This served as the basis for a few lectures on the nature of city slavery, with an emphasis on the difficulties and decline of slavery in the cities.

4. Eugene D. Genovese, The Political Economy of Slavery. This served as the basis for a few lectures. Emphasis was placed on slavery as a barrier to urbanization, as a factor in soil exhaustion, as a factor producing territorial expansion, and as a cause of the civil war. The students understood these topics.

5. Frank Tannenbaum, Slave and Citizen. This, along with Elkins and other books, served as the basis for lectures on the comparison of slavery in Latin America with that in North America.

6. Benjamin Quarles, Black Abolitionists. This served as part of the basis for lectures on the abolitionist movement.

7. W.J. Cash, The Mind of the South. This served as the basis for a lecture on the myth of the "old South."

8. Ulrich B. Phillips, American Negro Slavery.

Articles which served as the basis for lectures:

1. Sidney Mintz, "Review of Slavery by Stanley M. Elkins."
2. Carl N. Degler, "Slavery and the Genesis of American Race Prejudice."
3. Winthrop D. Jordan, "Modern Tensions and the Origins of American Slavery."
4. Edward W. Phifer, "Slavery in Microcosm: Burke County, North Carolina."
5. Herbert S. Klein, "The Slave Economics of Cuba and Virginia: A Comparison."
6. Harold D. Woodman, "The Profitability of Slavery."
7. Robert Starobin, "Race Relations in Old South Industries."

Other books and articles referred to though they did not serve as the basis for specific lectures:

1. Aptheker, Herbert, American Negro Slave Revolts. Nat Turner's Slave Rebellion.
2. Davis, David Brion, The Problem of Slavery in Western Culture.
3. Winthrop Jordan, White Over Black.
4. W.E.B. DuBois, The Suppression of the African Slave Trade.
5. John Hope Franklin, The Militant South.
6. H. Hawkins, editor, Abolitionists: Immediatism and Question of Means.
7. C.L.R. James, The Black Jacobins.
8. Leon Litwack, North of Slavery.
9. S. Sydney Bradford, "The Negro Ironworker in Ante Bellum Virginia."
10. E. Ophelia Settle, "Social Attitudes During the Slave Regime: Household Servants Versus Field Hands."
11. Marion D. De B. Kilson, "Towards Freedom: An Analysis of Slave Revolts in the United States."
12. Vincent Harding,"Religion and Resistance Among Antebellum Negroes, 1880-1860."
13. William H. Pease and Jane H. Pease, "Antislavery Ambivalence: Immediatism, Expediency and Race."
14. Edgar J. McManus, "The Negro Slave in New York."

N.B. These articles can be found either in Weinstein and Gatell or Meier and Rudwick, The Making of Black America. Laura Foner and Eugene Genovese have just edited a new series of readings in Slavery in the New World (Prentice-Hall).

Did you use film to supplement the teaching of this topic?

No, and this was a major weakness. At the beginning of the year it did not appear that we had enough funds for movies. It later appeared that we did, but then it was too late to order films. Good films are important in any unit, and the students asked for them. There is at least one good film on slavery, an N.E.T. production of "Slavery" which is closely based on Botkins' accounts of former slaves. Earlier in the year we had used the CBS "Profiles in Courage" production of "Frederick Douglass."

List and describe all class activities engaged in as part of the study of this unit:

Although I had lectured on the units during the first semester only a very few times, I primarily relied on lectures for the presentation of this unit. Generally I would lecture two or three times a week, with one or two days set aside for discussions. One of the reasons for lecturing was the nature of the material. Since so much of slavery is largely an historical issue, it is very difficult to employ the inductive method and to relate the material in the unit to the students' own immediate experiences. Another reason for lecturing was that I wanted to bring to the students' attention much information from various books which I had read but which was not contained in the assigned reading.

It should be noted that all the students expressed a liking for my lectures, as long as they were not too long and as long as there was enough time for questions and their own discussion of the material. The most common reason for liking my lectures was that the students felt that then they knew what was really important to learn. This reason upset me, because it placed the teacher in the old role as the sole custodian of knowledge. Nevertheless I did have some important reasons for lecturing. And I feel that it might be a good thing for students to be exposed to some lecturing on one unit during the year, and this occurred during the second semester, after they had a whole semester of class discussions and thinking for themselves.

We also had one class debate over pro-slavery and anti-slavery arguments.

What means of follow-up is being used--tests, oral presentations, writing, etc?

As was noted above we held a debate. There were no papers assigned, though last year we had had a short essay on Botkins' slave accounts. The main method of evaluation was a lengthy examination at the end of the unit. The examination was made up from a long sheet of review questions and identifications which the students had about two weeks to prepare. The students did very well on this examination for which the average grade was "B." There were only three "F's" and ten "A's." One of the best answered questions was the one on Genovese which showed that the students were able to grasp some very sophisticated material.

Evaluation of Topic:

For reasons which I have explained earlier, "slavery" makes an ideal social science unit; and it should be retained in the social science curriculum. It is easily one of the best ways of introducing various social science disciplines in one social science unit.

The unit was also important because it was the most scholarly of the year. We went deeper into certain economic and psychological questions than was possible in other units. The emphasis of the entire unit was in-depth examination of certain important problems.

Nevertheless there were certain difficulties with the unit. One was that too much time was spent on it--eight weeks. One could easily spend an entire semester or year on slavery in an upper-division course. But in this case the students eventually became bored with the subject and wished that they could turn to something new. So I would suggest that in the future the unit be reduced to four or five weeks. (One of the reasons for the length of this unit was accidental--a ten-day student sit-in and strike which interrupted the unit.)

Another major difficulty was that there was too much reading assigned. It amounted to about 150 pages a week, and none of the students got through all of it. So in the future I will cut down on the amount of material to be read.

TITLE OF UNIT: Vietnam (Special Issue)

Number of Class Sessions on Topic: 30 (five per week)

Dates Begun and Completed: April 1 - May 8, 1970

What was this particular topic intended to do?

This unit goes back to the end of the first year of the program when our CRG consultants introduced the teachers to a lengthy Vietnam Curriculum which had been developed by high school teachers in the Boston area. This instructor has made use of this unit in each of the three years he has taught it.

The purpose of this unit should be obvious. It is to introduce the students to the history, complexities, documents and opinions surrounding the controversy of the American involvement in Vietnam. This unit fits into the "Fourth Sequence" of units on "special contemporary issues" which were never really developed at the last summer conference. As such the idea was to give the students a case study or problem to be solved for which they would draw on the various disciplines in the social sciences. Moreover it was to introduce them to an "open-ended" problem for which there were no cut-and-dried answers but only tentative solutions. Finally the purpose of the unit was to engage the students in a major problem which was directly affecting them.

Outline of Unit Topics:

1. History of Vietnam until the French Conquest.
2. The Nature of French colonialism in Indochina.
3. The Origins of Vietnamese Nationalism and Communism--Ho Chi Minh.
4. The First Indochinese War, 1946-1954.
5. The Geneva Convention.
6. The Diem Regime.
7. United States Intervention.
8. Various arguments supporting United States Intervention.
9. Various arguments opposing United States Intervention.

What were the basic readings required of students?

1. Marvin E. Gettleman, editor, Vietnam, History, Documents, and Opinions on a Major World Crisis. Each student had an individual copy of this book. This book had been used the previous year for the same unit and apparently had caused no difficulties. However this year most of the students complained that it was much too difficult for them. The names and places were confusing. The discussions of foreign policy too abstract. The book too uneven. It was a collection of documents and articles rather than one continuous story, and this threw many of the students off. All the students asked me to lecture on various parts of the book so that they could have a better understanding. For many this was a help. Some students managed on their own to struggle through the book and came to a very thorough understanding of the issues involved. I was very worried that this book would frustrate the students completely and break their spirit. In the future I would use this book only as reference and assign only a few se-

lected articles. Lectures can make up for much of the past history of Vietnam. Unfortunately there is no other single book on Vietnam which is so complete and so concise.

2. Senator J. William Fulbright, The Arrogance of Power. Copies of this book were on reserve. The students found this much easier to read and relied heavily on it for their paper. Only the Introduction and Part Two dealing with "Revolutions Abroad" were assigned.

3. Howard Zinn, Vietnam: The Logic of Withdrawal. Copies of this were also on reserve. The students also found this easy to read, particularly the first half and they relied heavily on it for their paper. Many students found Zinn's arguments most stimulating and interesting.

4. Vietnam Curriculum. The instructor had the only copy of this, but he made use of several articles.

List supplementary materials to which the students referred:

No other works were required of the students. However, many students came up with outside material which helped them in the class discussions and in their paper.

List the resource or reference material for the teacher:

1. Jean LaCouture, Ho Chi Minh.
2. John McAlister and Paul Mus, The Vietnamese and Their Revolution.
3. Wilfred Burchett, Vietnam: Inside Story of the Guerilla War.
4. Bernard Fall, editor, Ho Chi Minh on Revolution (Selected Writings).
5. George Kahin and John Lewis, The United States in Vietnam.
6. William Appleman Williams, The Tragedy of American Foreign Policy.
7. Joseph Buttinger, Vietnam: A Political History.
8. Gabriel Kolko, The Roots of American Foreign Policy.

Did you use film to supplement the teaching of this topic?

Yes, we obtained the award-winning film, "In the Year of the Pig," from the Dallas Peace Committee. Several of the students had gone with the instructor to attend earlier the Dallas premier of this excellent film. It is a documentary film tracing the entire history of the struggle in Vietnam beginning with the Vietnamese fight for independence against the French and continuing through the American bombing of North Vietnam. The movie is pro-Vietnamese and against American intervention but not in a heavy-handed way. All points of view are well represented.

List and describe all class activities engaged in as part of the study of this unit:

It had been my original intention to explore this unit entirely through class discussions. Moreover I wanted to keep my own viewpoints concerning the struggle as hidden as possible. However, I found that I was unable to fulfill either intention. The students had so much difficulty in getting through the Gettleman book that they asked me to lecture on it. I did not actually lecture but I did go through the book and explain various parts of it. This usually only consumed about half the class period, and the remainder we used for discussions which were usually lively and interesting. The Fulbright and Zinn books also served as the basis for good discussions. Occasionally I brought in information from other books. But I did not do much in the way of formal lecturing. In any event I was unable to keep from revealing my own biases which came out at almost every point. I suppose that it was unrealistic to assume that I could have done otherwise. Nevertheless the papers reflected that the students were capable of making up their own minds. Even when they agreed with my ultimate conclusions, they were able to come up with many reasons of their own.

There were two assignments. The first was an essay of a length to be determined by each student. The student was to argue two positions, one that was in favor of the United States intervention in Vietnam and one that was opposed to that intervention. At the time of writing this report I have read only a few of these papers. But many of these are among the most beautiful papers I have read in three years of teaching. They reveal that the students are capable of wading deep into this complex issue. Each paper handled a great variety of items, and very few papers were similar. The conclusions were well thought-out and mature.

We also planned to have an examination written by the students themselves. But the students thought that the essay was enough work for this unit. So I finally agreed that they would not have to take the examination but that each student would have to prepare an examination of his own and present it on the day scheduled for the final examination. They would be graded on how well they prepared this.

Evaluation of Topic:

Vietnam is a very complex subject, and I do not see how one can get through it in less than four to six weeks. The Vietnam Curriculum suggests several approaches. One can discuss the problems of the developing countries of the Third World. Or one can discuss the impact of the war on American society. I chose the historical approach, to trace the development of the struggle in Vietnam from the French to the Americans. I was more concerned with Vietnam and the precise issues of the conflict than I was with the impact on American society. And, having fully examined the issues of the war, I wanted the students to make their own moral judgments. This was not an easy task, for one had to go through the complex entanglements of Asian history and American foreign policy. And for the students this meant exposure to much unfamiliar material. Teachers who do not want to get involved in all this strange territory might want to stick with the impact of the war on American society. But I suggest that any teacher interested in doing this unit get a hold of copies of the Vietnam Curriculum (usually advertised in the New York Review of Books). Everything comes ready-made. They also provide excellent examples of how curriculum units should be written.

Again I must mention my pleasure in reading the papers submitted on this unit. They showed that many students were capable of an excellent mastery of the subject. This has been particularly rewarding coming at the end of some very laborious and painstaking discussions. I felt that I had given the students too much to tackle. And I feared that their frustration might finally break all that spirit which they had built up during the year. (After all, I had first read Gettleman when I was twenty-five years old, a third-year graduate student, with three courses in American foreign policy and a passing familiarity with Asian history. Who was I to give this task to college freshmen?) Many students, however, refused to give in. They felt that Vietnam was too important for them to neglect; they felt that it was important for them to understand it. The important thing is that they felt free to bring out their difficulties. We spent some time discussing our problems. We decided to spend the rest of the semester on the unit. Not all the students survived the ordeal, but the end results seem to show that my mistake was not so much in over-estimating but in under-estimating the capability of most of the students.

STUDENTS ON BIOLOGY

Perry Mack
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One of the essay questions on my final examination read as follows: "Relate an experience during the past semester in biology that you considered to be significant, relevant and interesting. The experience can be a laboratory experiment, discussion, seminar, audio-visual materials, etc. Please justify in written detail your selection." The responses varied and the breakdown according to categories listed were:

	Areas of High Interest	Number of Students
1.	Dr. Watkins' Seminar on the "Psychological and Physiological Effect of the Pill."	19
2.	Discussion of the Life Reprint "The New Man."	3
3.	Effects of Variables on the Heartbeat Rate of Daphnia	1
4.	Fetal Pig Dissection	10
5.	Frog Dissection	5
6.	Film Loops on Reproduction and Human Birth	11
7.	Blood Typing	3
8.	Video-tape on "How Life Begins"	2
9.	Genetics Unit in General	3
10.	Teacher-pupil Conference	1
11.	Change in Concept and Interest in Science	1
12.	Exploring a Mammalian Heart	1

There are some duplications in that several students listed two and in some cases three experiences that they considered to be of equal value to them. Therefore, the total number of students' responses in all the listed categories is greater than the number of students (50). Listed below are some random samples of students' responses to the above mentioned essay question and their respective category. Students' initials are given at the conclusion of each comment.

One of the most interesting parts of the biology course was the article we read entitled "The New Man." The article was interesting because I'd never heard of this discovery before and something new usually awakens curiosity. The facts in the article itself were amazing in that man has come so close to creating human life.

Another thing that made the article interesting was that it tied in with some of our other courses. When we discussed test tube babies in other classes we had some idea of what was actually happening inside these test tubes.

Aside from being interesting the article really plunges you into deep thought. It makes you wonder will these things really come about and do you really want to be a part of it all. On one hand, you can see how beneficial it would be to have these discoveries put into effect. Yet, you also wonder about the morality and humanness of it all. I'm still not sure whether I will want to be a part of the future society, if scientists perfect the experiments, but I did enjoy the interesting and relevant experience in biology.

V. D.

The whole course itself has done wonders for me. I have learned more in this semester than any other biology class.

I enjoyed our class discussion and "The New Man." It is interesting how man in the future will have control over population. How easy life will be with the new things man is now learning.

C. B.

The one experience in Biology that I considered to be most significant was a laboratory exercise.

This was the experiment which was done with the fetal-pig. The experiment was most interesting and I'd like to credit that to the fact that during my course in high school, I never actually had the opportunity to dissect any such animal, especially not as well as I did in this particular experiment.

The dissection was almost a perfect one. All internal organs of the fetal pig could be observed clearly. Also the sex organs were very distinguishable. After finding all the organs, heart, pancreas, intestines, kidneys, etc., we decided to do even more intensive searching. This led us to the brain. The scalp was split down the center and we could see the skull and take a look at the actual brain.

This experiment was about the most interesting of all, even though others were also quite interesting.

V. M.

The experiment which I most enjoyed was the one dealing with the daphnia.

You were to take the water flea (daphnia) and place it under the microscope and get his rate of heartbeat. Well, anyway, there were these six jars containing unknown substances. After the experiment was over we found out that certain substances were depressants and some were stimulants. Such things used were smoke (tar and nicotine). It showed us what we were doing to our bodies when we smoked, or used drugs such as speed, etc. The way we could tell that it would do damage was by recording the rate of the daphnia's heart beat. It would slow up some times and beat very fast at other times.

It showed the harmful effects that those six liquids could have on your body although not all of them were basic detriments.

C.B.

I benefitted from the laboratory exercise "How to Dissect a Fetal Pig." I enjoyed this because we were able to see the various organs involved in reproduction, circulation, respiration and digestion. By being able to see the various parts, I could understand their functions more thoroughly.

Not only was this experiment helpful but it was also interesting because some of the students who were dissecting pigs saw other organs that I was not able to locate. The handout on "How to Dissect a Fetal Pig," was very useful.

K. G.

The experience in Biology that I consider to be most interesting was the open-ended laboratory period on the dissection of the frog. The experiment started out with one purpose to dissect the frog, however, there developed many aspects. The use of the different depressants, and stimulants on the frog. Finding the parts of the frog, removing the eggs of the female frog and sperms of the male frog and even fertilizing the egg in vitro.

The experiment was different in working with live specimen. The stages of the experiment were: obtaining the frog, determining whether it was male or female were all interesting and informative.

S. N.

I think the most interesting and significant happening in biology this semester was the experiment on the frog. The second being the talk--discussion on the pill.

I was rather tense and unexcited about messing with a frog. I've never bothered on and didn't intend to this time; so I thought. The way our instructor, approached the class, messing with the frog making him seem really harmless, I forgot most of the old wives' tales I've heard. Through all the tension in me there was one funny part that made me more relaxed. Mother-nature took charge over the frog and a liquid substance was sprayed towards the class. I laughed and then got in my group to work.

A.S., my laboratory partner, pithed her frog and didn't inject the frog with some kind of sleeping "stuff." Our specimen was a female. In her abdominal cavity were many black and white eggs. L.S. tried unsuccessfully to mate a frog's egg and sperm.

After we cut the frog open and pinned the skin to the dissecting table we looked at the anatomy of the frog. The heart was slowly pumping and the lungs were slightly inflated in our frog. In one group, the frog's heart stopped beating and they revived it by finger massaging.

Back to our group we pointed out the liver, gall bladder, large and small intestines and some other organs. We put a solution on one of the intestines and saw a reaction similar to that of excreting biles, I think.

We did other things to that poor little frog that I cannot recall, but are in my notes. That experience was knowledgeable and enjoyable to me.

A. M.

I thought the single-concept film loops about reproduction were both interesting as well as relevant. Being able to stop the film at any given point enabled the students to take notes effectively as well as give them a chance to ask any questions on a certain aspect of the film. The films also gave a concrete explanation of the reproduction process. The one film showing the lady going through the process of having a baby was good. It gave many of us an opportunity to see a woman in actual labor. It also gave us a chance to witness the afterbirth being expelled (something I had never seen) and other such interesting features. I think there should be more single concept films because they really do give a clearer explanation than most films. (Also the teacher can stop the film and make important comments about a certain part while the students themselves are viewing it.)

C. W.

One experience that I considered significant was when we used the new audio-visual film loop projector and saw the film loop on the birth of the baby. It was a new way of showing films and can also help in classrooms with the teaching. I saw a special on this equipment last year. It is being used as an experiment in special classes to see the results. The purpose is to see how well the child will learn from this equipment. The other equipment was the television that showed a taped special from the regular television on "How Life Begins." I had never seen anything like this.

D. H.

To me there have been a number of interesting things in biology. As for a particular incident, the experiment on blood typing, where each member of the class was permitted to find her blood type was most interesting.

The subsequent discussion of blood typing and disease of the blood was also very interesting.

I've always been interested in sickle cell anemia because it affects black people. I know a great deal more information on this disease from the biology lectures and discussions we had on the blood and its functions.

R. P.

The experience that I felt to be significant, relevant, and interesting this semester was the experiment we did on blood types. I learned more from this and it seemed of interest to everyone. It was important and also fun learning about different blood types especially your own.

If everything in science could be directly related to me I would probably get along better.

R. M.

The most interesting experience I had in Biology was that of viewing various films with the hlp of audio-visual aids. I especially enjoyed "How Life Begins" and the film involving an actual human birth. Many things that I didn't know were revealed in this and other films as well. They inspired me to ask questions and thereby become better informed. I also especially liked "The New Man" and the other scientific reprint on reproduction. The implications were exciting and the fact that we shall be facing them provided for more involvement and class discussions.

T. S.

An experience during the past semester in Biology that I considered to be significant, relevant and interesting was the discussion of the unit on genetics. I thought that it was very interesting in that I found out a lot of information on how my body operates that I never knew before. I knew that there were certain genes and certain traits that I inherited from my parents but I never knew how I got them in detail until we finished the unit on genetics. I have always wondered why certain animals are one color and the others another. Now I know that they inherited certain traits from each parent to get the color they are. I learned also that this is true with humans. I think that all the information I learned about genetics is relevant.

A. S.

The experience I consider significant was the unit on Genetics. I think this was interesting because it can easily help in the future. Even though the entire course was significant, understanding genetics seems to be the answer to many of the problems that future generations will face.

The most interesting part was finding the genotype and phenotype even if I don't know fully how to find them all the time.

L. F.

The most significant situation that I can relate to that occurred during the semester, would be the conference that I had with you just before the Christmas Holidays. Before this time I had wanted to come have a conference with you, but I just couldn't get the nerve. After the conference, not only did I feel more at ease with you, but I also have gained more confidence within myself about Biology.

I have enjoyed being in your class during this semester. I do feel that I have learned something.

J. T.

I have enjoyed the course this semester. For the first time, I really found a science course interesting. However, I feel that the discussions and lectures were most significant. The material was interesting and it was presented in an interesting manner. Perhaps, I found the discussion of genetic problems were most interesting. I feel that I have personally gained from that section as well as all the other lectures.

Also, the A-V films on reproduction were most helpful. I now have an entirely different idea of science because before I did not enjoy it.

L. H.

The experiment that I enjoyed most was the one in which we dissected and examined a cow's heart. I found this experiment interesting, significant and relevant because it enabled me to see just where and how the blood flows through the heart.

In this experiment, we first examined the heart to locate the four chambers - right auricle, right ventricle, left auricle, left ventricle. We cut through the tissue of each one of the ventricles. One could see from the texture and thickness in the walls of the ventricles why they each perform their different but specific tasks. Tracing directly the pathways of the blood through the heart we were able to understand better the complicated procedures of this important organ. We were able to see precisely how and why arteries differ from veins in that the arteries (carrying oxygenated blood) were red and the veins (carrying deoxygenated blood) were blue.

Also we were able to examine various values and test them in actual operation. I really enjoyed this experiment because it was informative as well as enlightening and enjoyable.

D. T.

The chapter that dealt mostly with reproduction was outlined beautifully and was taught quite well.

I must admit I knew little about the subject on sex, come to think of it most of the terms I heard were both strange and new to me. With a little research and studying, however, I finally got with the swing of things.

Leaving that section of work left me with a much fuller understanding of what it's all about. Of course all my questions aren't yet answered but the way to getting those answers are a little brighter.

I particularly like the openness in the discussion on sex, the ability of our instructor to bring out all the answers most of the girls were a little ashamed to ask. With the aid of an outside guest to come and speak to us, the chapter on sex was completely successful to me.

I must say, however, that all the chapters to my knowledge were handled the same way but my interest was turned mainly to that one on Reproduction.

C. G.

I really enjoyed Dr. Watkins' seminar on "the pill." The reason was because there have always been questions in my mind concerning "the pill."

Through his discussion, I was able to see clearly what it, the pill, was all about. By bringing it down to our level, it was easily understood.

Since the seminar, I have heard various radio reports on "the pill." These reports were telling of the dangers that the pill could have on us as woman - the diseases that it may cause and the effect on future generations. Because of the discussion, I was aware why this pill could be as dangerous as it could be helpful.

Now, I can go into marriage knowing things that a woman should about certain contraceptives. That seems to be the most important thing now because millions of women taking "the pill" really don't know of the dangers that may lie ahead of them.

So this seminar was very informative as well as interesting.

W. D.

During the time in which our class was discussing Reproduction, we viewed scenes of natural childbirth. I cannot remember the name of the apparatus used, but it made our understanding the process of childbirth easier. We also viewed an experiment, The Fetal Pig, which we did in class later. This machine made the action appear more real.

Our class had several interesting discussions. Our instructor was very helpful in aiding us in expressing our ideas clear and precise. One of the liveliest discussions we had was the one on birth control. Our guest speaker was Dr. Watkins, from L. Richardson Hospital. He informed us of what the pill does, its psychological as well as physiological effects. The girls seemed to enjoy this discussion very much.

I enjoyed the discussion because I had never before heard the pill talked about from those aspects.

M. M.

The whole semester was a very invigorating experience for me, the class discussions, experiments and films, so because of that reason I can't give any one particular experience, but I will pick a few of my favorites. 1) Discussion of a fetal pig, the main reason why I enjoyed it so much was because it was the first time I had ever seen a real complete organism that was unborn.

2) I enjoyed the film we saw on an actual birth. I had seen films that showed parts of the birth process, but never the entire process.

3) I also enjoyed the Life Reprints that were given to us, especially the first one that discussed transplanting a human embryo from its natural mother to a foster mother, and the use of artificial parts and organs in a human being.

4) Another part of the course I enjoyed was working with the hereditary problems and picking out gametes because genetics has always fascinated me.

J. B.

[The Editor would like to add his own conclusions concerning the votes and remarks of students.

1. Students are most interested in those topics that bear on human physiology, especially human reproduction and birth control. Dr. Watkins' seminar on the "Pill" gets almost twice as many votes as the next contender. One student wrote: "I particularly like the openness in the discussion of sex, the ability of our instructor to bring out all the answers most of the girls were a little ashamed to ask." Another student stressed, after mentioning blood typing, the need to relate to himself what he is studying: "If everything in science could be directly related to me I would probably get along better."

2. There seems to be some interest in broad philosophical questions, the morality of science, where is science taking us, as seen in the interest in the article "The New Man."

3. A number of students find the use of filmed presentation of material particularly effective. Thus, students rated highly the film loops on reproduction and human birth. This rating also constitutes further support for point one above.

4. Students like laboratory activities where they really get to do something. Dissection of the fetal pig and of frogs are mentioned by a number of students.

5. Some students apparently are getting nothing at all and perhaps this is unavoidable. At any rate, such is what I make of statements in which all the students can say is that the material is "interesting" or "enjoyable" or as one student wrote, "I do feel that I have learned something."]

STUDENTS ON PHYSICAL SCIENCE

Dennis Holloway, Jr.
Physical Science
Jackson State College

In September, 1969, one hundred students were enrolled in four classes of twenty-five in the 13-College Curriculum Program at Jackson State College. These students had very little exposure to chemistry and even less to physics. In no case, had any student looked at these areas in any rigorous fashion. They had memorized "facts" without obtaining any physical appreciation for using them and their mathematical background was very poor, so they generally disliked science or feared it.

This science course was devoted to correcting these deficiencies and attitudes toward science. The approach used was laboratory oriented where the students discussed various concepts in detail and carried out activities applying these concepts to explain various physical phenomena. Mathematical concepts were stressed only where they were absolutely necessary in order to keep the student from getting bogged down here. No attempt was made to avoid the painstaking, intricate steps that scientists encounter in their study of various systems. Emphasis was placed on verifying everything that was discussed. The experiments and activities were approached open-endedly. The students could pursue any one activity or experiment into any number of avenues according to their own interests.

Instead of attempting to cover a lot of material and use their coverage as a measure of the success of the course, great care was devoted to selecting activities in units that were rich in depth and experiences that students would find exciting as a means of motivating the students to interrogate nature directly.

Since it is virtually impossible to completely exhaust any area of science in depth within a year, this course has as its chief objective to motivate the student to think profoundly and be able to apply the concepts that are related to physical science phenomena. Materials are covered in depth. Timely materials are selected and presented in such a manner that both the instructor and students find the science course productive, wholesome and exciting.

This past school year opportunities were made available so as to deemphasize science material we had previously used, namely PSNS and PSSC. We are nearing the point where we can refer to the science materials as ISE science. However, some PSNS experiments were used because they are good experiments and the students seemed to have enjoyed doing them.

Titles of Units Covered During One Semester or One and a Half Quarters

I. Introduction to science
II. Measurements
III. The nature of light
IV. Interference of waves
V. Crystals
VI. Solids, liquids and gases

VII. Force and motion.
VIII. Charge

Many additional units could have been added if time had permitted, but it is of the utmost importance that one not sacrifice in depth study for "number of pages covered." This is not a survey course.

Student Response to Various Laboratory and Classroom Discussions and Activities:

The basis for this report is a collection of anecdotal notes taken from actual classroom experience. The notes have been grouped with reference to specific experiences.

These are some of the things students had to say about the Salol experiment. The objective of the experiment is to test one's ability to make critical observation.

"From my observation of melting and crystallizing salol I noticed as a salol crystal grows the diamond shaped faces increase in area, but the angles between the edges remain the same. I also noted that a small piece of un-melted salol or (seed crystal) was necessary for crystallization to take place. One question comes to mind. Will crystallization occur if some crystal other than salol is used? By using different substances which were very similar in size, shape and color as control variables I was able to deduce that substances that closely resemble each other may react entirely different when exposed to the same set of conditions."

"In the salol experiment I think it would be safe to conclude that most crystalline material that have been melted will solidify if given enough time. However, the liquid will solidify sooner if a seed crystal is added to the liquid. Personally, I feel that the experiment was important because I was able to see, and observe the shape of the crystal as it really formed."

"Since heat was used to dissolve the solid, heat should be evolved during the crystallization process."

"The salol crystal looked somewhat like crushed ice with similar shapes and lines extending in all directions."

"While observing this particular experiment, I found that seeding the melt was very interesting. My hypothesis is that the bit of material placed in the melted substance served as a "heat absorption device. The only thing I got out of the experiment was watching the substance crystallize."

The following comments were made by students after they had finished the unit on measurement.

"This experiment was very amazing. I found out how to determine the mass of an original log from a small portion of it."

"If you know the dimensions of a fragment of anything, you can determine the mass of the original from which the fragment came. Even this big earth."

The results of this experiment indicated to me the concept of density and how it relates to the measurements of an object when only a small portion of that particular object is present."

"This experiment gives a person a better outlook on understanding mathematical problems. It tends to make one think with more accuracy."

"From this experiment I learned that a general knowledge of the application of various mathematical concepts is crucial in making fairly accurate measurements."

"It was somewhat interesting to note how an original volume of a substance could be found by using a fragment of that substance. However, without notes, the different formulas are somewhat difficult to apply."

Listed below are some of the comments students made after using Young's Double Slit Experiment to measure the wavelength of light.

"I used the following materials in order to complete this experiment; a meter stick, microscope slides, and two razor blades. After going through all of the procedures for this experiment we were told that we had measured the wavelength of light. I don't believe that this statement is factual, because in reality I don't believe light can be measured in this manner."

"I found this to be one of the most interesting and challenging experiments of all. I don't believe scientists have developed a device that will measure a wavelength exactly, but they do have a system which will give a good estimate."

"I didn't enjoy this experiment because I don't believe light waves can be measured and it was very dull. So I don't have a conclusion."

Comments students made about the experiment Heat Transfer from Different Substances also proved to be quite interesting.

"I liked this experiment and I also disliked it. My dislikes came as a result of my hand getting burned from the steam bath. I had to hold it there 15 minutes you know."

"After doing this experiment I can conclude that it takes more heat to heat an equal mass of glass than it does steel. Why?

1. Density (greater in steel.)
2. The lesser the density the greater the heat required to heat a substance."

"From this experiment I noticed that different substances when subjected to the same set of conditions will yield totally different results."

"This experiment revealed to me that different substances require different amounts of heat in order to be raised to the same temperature."

The following comment came after Observation of Dissolving Solids.

"The significant difference between sodium carbonate and ammonium chloride is the fact that similar physical characteristics are not the basis for determining whether two substances are the same but their chemical composition is what differentiates the two."

FROM FILM SHOWING TO FILM MAKING

Jeffrey Price
Humanities
Talladega College

Introduction

There were approximately fifty students divided into three sections. Each section met twice a week for an hour each and all three sections met together for one hour per week. In general, the section meetings were for discussion and the larger meeting for lectures, film showing, exams, etc.

The course was divided into two parts. The first semester dealt with some aspects of the individual as he stands towards the artistic influences on his life. The second semester investigated the origins and development of the current Western Cultural scene.

Materials

The written and printed materials will be mentioned in the text of this report. The mechanical equipment included:

Bell & Howell 16mm Movie Camera
Tripod, lightmeter, editing viewer
  and splicer
16mm Projector
Slide Projector
Phonograph
Tape Recorder

The Method and Content of the Course

It is difficult to give a logically rigorous and complete description of this humanities course, because of the extent of the possible subject matter and the flexible and improvisational nature of the classroom procedure. I will here give a rough chronological account of what occurred in the classroom.

We began by reading copies of the speech given in Cambridge by Professor George Wald, in which Western culture is depicted as being in a crisis situation, chiefly because of the threat of nuclear war. Discussion led us into consideration of the (allegedly) "absurd" condition of modern examples from the current art scene, e.g. contentless painting, pop art and "found objects"; a filmed interview with the perfectly noncommital, uninterested, and uncommunicative Andy Warhol was shown. The question was raised whether this stuff accurately represented the current state of our culture, and, in fact, what a culture _is_. This led to a discussion of how a people's account of their _origins_ help them to define themselves and was used as an opportunity to introduce various creation myths.

The accounts of creation included: 1) the _Genesis_ story, where man is seen to be a creature of a perfect being, 2) the Greek myths, where things begin in chaos and are built up by the actions of exaggerated human types, and 3) the modern scientific account, where order is produced by the working of indifferent natural laws. The discussion could conclude only that contemporary man may be drawn by all or any of these views, a situation which may be a clue to the current worry over the "identity" of our culture. We also read a couple of short tales which have been billed as African cration myths; neither the instructor nor the students could make much of them, however, no doubt because of great ignorance of the culture they form a part of.

Next we moved (notice the ironclad rigor in some of these transitions) to an example of how the spirit of a culture could be captured by or in a novel, in this case Huckleberry Finn. There was discussion of the American dream of the individual's opportunity to participate in, and be carried along by to who knows where, the unlimited resources of the frontier. We discussed what was it that Huck left, how did he leave, and where did it take him. Also of interest was the role of the Black man in this American journey.

Then we considered how a writer could capture or depict a culture at the same time as he was part of a movement to change the conditions of that culture; we read works of protest and alienation by modern American Black writers. These included Cane by Jean Toomer, some of Gwendolyn Brooks' Selected Poems, Richard Wright's The Man Who Lived Underground, and Clara's Ole Man by Ed Bullins. Classroom readings aloud and dramatizations were part of the method of consideration. We also read the prose essay "The Black Arts Movement" by Larry Neal. It was easy to see that much Black writing was indeed a means to a political end, but some students also seemed to become convinced that many of the works had an individual, inherent, or artistic worth.

Interspersed with the above was an introduction to Western Art. Slides of certain Renaissance, impressionist, abstract expressionist, and muralist painters were shown, usually with an hour devoted to each painter. There was some attempt to relate the painting to other items of discussion (for instance, I introduced Greek sculpture during the discussion of how the Greek myths incorporated exaggerated or perfected human attributes), but in general the discussion of art diverged from the literary work. One reason was that the slides required the large weekly session, and thus were difficult to immediately integrate into the smaller discussion groups. Anyway, the students were told that they were responsible only for identifying the painters we studied, when shown an example of their work (not necessarily an example they had seen before), and that they would not have to write anything about the work. When showing the slides, after a few introductory remarks, I would let the students discuss among themselves how to recognize a certain painter's style. I think I avoided a lot of the flowery and empty generalities that art history courses often contain. I hope that it also made students look more closely. For a beginning level at least, I can recommend this method.

We wrapped up the semester with a discussion of possible contributers to the being of a particular human. What is contributed by society, what by nature, what by the Divine, and what by the person's own initiative? I tried to relate these questions to the semester's work and to new examples raised by students in class, and to suggest that the ability to ask these questions could be useful in other studies that the class members might undertake.

The second semester might be described as a general survey of the culture. We began with what was then (January, 1970) the timely issue of the Biafran secession. We tried to acess the economic, political, religious, and cultural aspects of the situation. What happens when industrial culture is introduced in an alien area? We did get some questions raised, but lack of good hard information prevented us from answering very many. Incidentally, it provided a good opportunity to read, and try to make mental corrections for, biased reports. We found almost no writer of any interest who did not side strongly with either the Biafrans or the Federal Government.

The students read some sections from Hobbes' Leviathon, and we discussed the modern notion that man is defined by his unlimited desires and that political institutions exist to provide those desires with the most complete possible fulfillment.

Next we read Marx's Communist Manifesto and discussed whether economic considerations do govern history, and the role of revolution and the class struggle. The instructor introduced excerpts from various other of Marx's writings, also.

Then we read Knorad Lorentz's On Aggression and discussed the role of biological forces in the determining of a culture.

This was followed by a reading of Freud's Civilization and its Discontents and a discussion of the degree of seriousness of the restraints or repressions that society places upon an individual.

At the end of the semester we tried to draw some of these things together and relate them to the "Black experience". For instance, we read an essay by Bayard Rustin and discussed whether the disadvantaged position of the Black man could be described, and alleviated, by purely economic considerations, and how much of Marx was relevant to this. We also discussed whether Black "soul" is evidence that Freudian repressions do not apply (in the same manner, at least) to the Negro race.

Interspersed during the semester was a unit on the production and appreciation of motion pictures. Because we had only one camera, and because it was not always in repair, and also because the instructor was late in getting the project organized, there was very little production this year. I hope that next year an earlier start, and better planning, can result in a substantial improvement over this year's showing. There is now some interest developing. Also, we had some bad luck with film rentals, with some arriving too late to be shown, others cancelled, etc. However there were a few successes: some of Norman McClaren's films (Begone Dull Care, Lines Horizontal, Pen Point Percussion, and others) were both very enjoyable and gave a widened concept of the uses of the medium (In one, McClaren is shown pointing directly on the film.) Also, some student films from Northwestern University (The Great Bicycle Chase, The Corner) were enjoyed and showed the students good work which was done with hardly more equipment or expertese than is available to them. Advice for next year: plan and order early.

Some Evaluative Comments and Other Random Remarks

I believe that in spite of the experimental situation, traditional exercise in developing strong and coherent written prose expression was, and should be, a major part of the humanities course.

I found it to be a good idea to give the historical setting of any work dealt with in class. One should not assume that the students know a great deal of the social, economic, political, and intellectual climate of late Nineteenth-century Vienna, or, for that matter, of Harlem in the 1920's.

It was a great boon to be able to purchase books and other materials for the students. Many students are still in the process of acquiring a great comfort with, and fondness for, books, and are reluctant to buy too many of them. More important, though, is the flexibility made possible by being able to get new materials on short notice (which is very difficult when working through the bookstore); among other things this flexibility and quick ordering makes student participation in the choice of materials a practical reality.

I suppose that every "humanities" teacher is stronger in some areas than in others. In my case music is a particularly weak point, and my experience this year has shown that deliberate concentration and planning will be necessary in order to insure an adequate amount in the curriculum.

I have found that in dealing with Black materials there is a tendency for some students to fall into a very repetitious, and thus ultimately uninteresting, rhetoric. Care in making your expectations clear can mitigate this situation to a degree.

It requires an unexpectedly large measure of practice, patience, and self-confidence on the part of the teacher to achieve a genuinely "open" classroom situation where student participation is a major contributor.

I believe that the course did achieve a broadened awareness, on the part of most students, of some of the forms and examples of artistic expression and cultural development. In addition, some seemed to become aware of the interrelatedness of various of these phenomena, and furthermore developed the ability to take a meaningfully critical and evaluative stance toward aspects of experience that had been ignored or taken for granted. Also, participatory exercises made cultural phenomena more real to them. The chief drawback, I believe, was that levels of interest and involvement by the students were not consistantly high. [illegible] of this might be corrected by experience with the particular projects attempted this first year. I believe it possible to have both [illegible] traditional content and skill development and also to be more free-wheeling in [illegible] participation, performance, and discussion.

OLD THINGS, NEW THINGS, AND IMPLEMENTATION

Leslie Sanders and Wayne Ticac
Philosophy
Southern University

(Leslie)

We are in agreement with the kinds of things discussed during the Washington meeting regarding the role of logic in the course and would like to see suitable material developed this summer. As noted in the enclosed outline, we were dissatisfied with the Russell, Problems in Philosophy and propose as an alternative Capaldi, Human Knowledge although we are not certain it is the best possible text. The advantage of the Capaldi is that he goes in a direction sympathetic to the general philosophy of our course. Russell does not.

We both found that the weakest part of the present first semester course is the beginning; the course needs a more compelling introduction. For the first six weeks or so, the students had difficulty seeing what was going on or what was demanded of them. It seems there must be some more effective way of making problems clearer and/or more interesting during the initial part of the course. The students found the materials we have labeled 'social perception' extremely interesting but questioned why we were dealing with them, although in retrospect they found them important and meaningful within the context of the course.

The severest criticism of the way we conducted the course that I have is one Wayne mentioned in discussing his first semester. We gave very few writing assignments. I cannot see any substitute for frequent, short papers which require the students to sit down, think through and put together the materials discussed in class. Such assignments have several purposes. The students have considerable trouble putting an argument down in writing and need practice. Since very few students consistently go home and think about the course, the papers presumably would enocurage this practice. They may also help those students who do spend a lot of time mulling over the issues raised in class clarify their thinking. Occasionally beginning a class by suggesting a question and asking the students to take ten minutes to jot down their ideas has similar effects. (It also seems to encourage more reticent students to contribute to the discussion). We suggest that a lot of time be spent this summer working out such assignments. Much of Dale's material is the kind of thing we have in mind.

I would also like to recommend that we try to do some close analysis of the kinds of problems the students have in thinking, reading, and writing. I have noticed that very often what might be termed incorrect grammar or poor speech is not that at all, but rather an uncertainty or confusion about what is being expressed. If a student really understands what he is writing about, his grammatical errors are at a minimum. For example, I recently assigned a paper which was fairly difficult and required careful thinking. Almost all the students put a tremendous amount of work into the paper but I discovered that even students who rarely make a single error had incredible mistakes, e.g. sentences that made absolutely no sense. This is a pattern that I suspect other teachers can confirm.

There are other problems that I think are often viewed as incorrect verbal expression. For example, many students confuse generic and specific terms, e.g. that virtue is generic and justice a type of virtue or that symbol and symbolic language are two different things. Other more easily identifiable assumptions and implications of statements or arguments and the difference between the two; or in distinguishing between causes and evidence. Wayne and I have had a tendency to do no more than correct errors on written assignments, but I think we should have and in the future must try to identify the problems and correct them. I am not sure how, but if we are aware of them and try to foresee where they will arise (e.g. in material used) we can make the students aware of them and possibly try to develop some exercises to correct them. Obviously the finer points on even so accessible a paper as the Waisman will escape students with these kinds of difficulties. I am emphatically against penalizing papers on the basis of such confusions, but they do need work.

Some other thoughts: Wayne and I have some disagreement over to whom the course should be geared and who profits most from it. Certainly the best students seem to get the most out of it and almost all our A students from the first semester returned the second semester. It has been my experience that quite a few very average students who begin the course doing C or lower level work improve tremendously during the year--they say that the course helps them "think better" and it seems to do so.

We did, however, make the recommendation that a few very poor students drop the course second semester. The students only get out of the course as much as they put into it. I am not sure whether this is a virtue or a fault of the course, but it certainly hinders the very poorest students. Part of the problem is that the course becomes most meaningful and involving when the student begins to apply it to his other courses and to the "world". We found with the architecture students particularly, but also with the program students, that only the best were willing to do this.

Notes on implementation: In addition to the architecture course, Jacques will be teaching a course for the Honor Program juniors and seniors. We have also had several talks with the chairman of the Philosophy department. He favors the general approach and content of the course but is dissatisfied with the specifics--he requested a more detailed outline than the one we gave him and we have not yet prepared it. The course is producing a small number of majors and minors and this has helped his attitude considerably since he is looking for a course that will recruit people into philosophy.

As we reported in Washington, the method of implementation we have found most successful is that of approaching individual chairmen and offering to teach the course for majors within the department. The description we are using might be termed "applied epistemology." This has an added tactical advantage: the course is already listed in the catalog under the 13CCP and so we don't have to go through the red tape involved in instituting a new course.

interrelatedness of ethical, political, and epistemological considerations. The students found it consistently interesting and enjoyable. It is taking all but the last three weeks of the semester.

We read as follows (pagination, Cornford):

1-129
139-143
163-168
175-235
265-320

In conjunction with various sections we read:

Machiavelli, The Prince, ch. 5,10,12,14-25
Hobbes, Leviathan, selection (cf. summer material)
Karenga, from The Quotable Karenga (")
Cleaver, "The White Race and Its Heroes"
"On Becoming"
(Soul on Ice)
Tillich, "Religious Symbols"

Initially, I was not sure how to approach The Republic--what happened in fact was, I think, a valid method. We began as though TR was a political work and the process the class went through could be described as, "either this guy is a fool or he is really talking about something else." Each time this occurred (notably with Thrasymachus, Gyges' ring, the education section and finally, the divided line) the opportunity to explore other levels arose naturally.

The interpretation I gave TR is that it is about ethics, not politics, and that Plato was trying to work out, in essentially mythic language, a notion of the individual and society based on his belief that a society could and ought operate according to an ethics based on absolute principles. I stressed the ideas concerning virtue as knowledge, spent a lot of time discussing Plato's belief that men naturally desire good and that evil is done through ignorance. The sense of the work that I hoped the students would acquire is that TR is Plato's plea for the doing of ethics and that his own discussion of the state's dissolution is a tragic statement. The approach seems to have succeeded. What follows is an outline of the major topics and discussions which arose out of our consideration of The Republic.

I. a. Definitions of Justice

Cephalus
Polemarchus
Thrasymachus
--their characters
--their definitions of justice
--Socrates' objections

The following ideas were emphasized: the problem of knowing in Polemarchus' definition; the notion that the just man cannot do harm; in Thrasymachus: the relativism and a morality of his position; the notion of ruling as an art; the end as justifying the means.

(Wayne)

My course this year has been a mess. Rather than pursue the course as I had planned it last summer, I experimented with techniques and materials. I fear I didn't learn as much as I had hoped I would, and the students remained confused throughout most of the year. The whole effort may well have been a mistake, at any rate, what follows is some of what I found.

I had noticed that when the students were given a written assignment they became so anxious that they were unable to relax enough for class discussions. They wanted me to say things which they could use in their paper; to review what had been already covered, and to tell them what was relevant to the paper in the reading material they had been assigned. Therefore, in order to save the classroom discussions, I abandoned writing assignments. I stuck to this all year and it has proved to be disasterous. With nothing at stake they simply stopped working. I clung to the idea that if the discussions could only be made interesting enough then surely they would regain interest. Indeed, class attendance was generally good, and they all talked in class, but it was apparent that once outside the classroom they forgot about philosophy. I kept going, nourished by the fact that during a discussion of the existence of God, and again during a discussion of abortion and euthanasia they did very good work. Unfortunately, I could not find a way to make everything as interesting, or relevant, as those topics.

I speculated that perhaps things would have been better if I had stuck to the course plan. Perhaps if the students had been able to discern some direction to the course, they would have been more willing to work. However Leslie, who considerably reduced the number of assignments she gave, did follow the course plan and still had some difficulty getting the students to work.

I am not willing to argue that everything can be made interesting to all students, but it certainly seems that anything worth learning can be made interesting. (I am assuming, of course, that philosophy is worth learning.) I don't like the idea of assigning papers for the purposes of motivation but that is what I am left with at this point. The whole matter will receive more thought this summer.

Another problem developed as a result of my testing method. Because the semester was so confusing, I could not think of a fair way to test them at mid-term. I finally settled on an oral exam. Each student met with me for fifteen to twenty minutes and as a method of evaluation it worked very well. It turned out to be of little use to the students, however. Within several weeks of the test they had forgotten just what had been said, and in the end it deprived them of yet another opportunity to have something concrete with which to judge their own progress.

Most of the remainder of my experimenting was done within the context of the original course plan. I almost completely eliminated the logic "unit" and that was a mistake; not because the students need logic to improve their reasoning, but because knowledge of a few selected logical notions provides one with tools which are very useful as analytical shortcuts. My only use of logic came as part of a larger scheme introduced about midway through the first semester. It would serve no useful purpose to explain the scheme in detail since it was hastily constructed and only moderately successful, but briefly it was as follows.

The students were to choose a statement, any statement, and we would explore its presuppositions and consequences, dealing with various philosophical problems as they arose in our pursuit. Rather than stay with one statement, we would change whenever the students wished, with the stipulation that with each new statement we must return to the beginning. In this way we would encompass an ever widening circle of philosophical problems, seen in a variety of contexts, and possible we could discover some general form to the analysis of statements.

We only examined three statements; "Money is the root of all evil," "Time waits for no man," and, "America is a racist society." However, considering the haste with which the scheme was concocted, I was gratified with the results. We stopped for the simple reason that I got lost. Keeping track of where we were going and where we had been became a rather complex operation, and with the students choosing the statements there was no way to predict what would come next. I am still intrigued by the idea, and I believe that if it is approached with careful preparation it may be very successful.

Some General Thoughts on the Program

---The attempt at interdisciplinary work last summer, "cross fertilization," was pathetically timid. It seems that much more thought must be given to this, especially as to how it relates to implimentation of the courses on the individual campuses, and the life expectancy of the Program as a separate department on those campuses.

---I think the CRG staff, or someone, should collect as much information as possible about efforts being made on campuses throughout the country to improve the teaching of philosophy, and see to it that we all receive this information. Not to do so seems wasteful and presumptuous.

---In spite of a money shortage, I find the material support at Southern more than adequate. We have more machines than I know how to use; in fact, I have trouble finding ways to use all of those with which I am familiar.

---From my perspective, the support of the administration at Southern has been whole-hearted. We have received complete cooperation in everything we have attempted so far.

---For what it is worth, I am optimistic about the philosophy course. The philosophy teachers seem to be in general agreement concerning the goals of the course and the method for reaching those goals. I expect the summer will be very fruitful.

Second Semester (Leslie)

I decided to do The Republic the second semester and see what happened. I found that it did what we had hoped it would do when we discussed doing Plato at the Greensboro conference; i.e., it demonstrated the

I. b. Machiavelli

In dealing with The Prince, we dwelt on the implications of the non-ethical position, especially questioning how or whether one can speak of justice from such a position.

II. a. Glaucon's argument regarding contract and the Hobbes selection.

--H's definition of justice
--his notion of human nature
--contract
--idea of rights
--idea of self-sufficiency vs. Plato

At this point, we spent about a week dealing with the kinds of things involved in assuming man has natural rights. The issue used to set up the discussion was abortion; the students introduced the role of the belief in natural rights in the civil rights struggle.

b. Gyges' ring

This section wetted their curiosity--they could not imagine how Socrates could answer Glaucon's objections.

III. Education

This section dealt with most specifically were those concerning the functions of religion, of myths about heroes and the recommendation of censorship. In conjunction with this section we read the Karenga and Cleaver's "The White Race.."

IV. Virtues in the State and the Individual

The students had relatively little problem with Plato's concept of virtue as knowledge and had several fierce debates over whether the belief that men only do evil out of ignorance was valid. But the idea of function and of justice as each man performing his function disappointed them greatly.

Working out the definition of justice afforded the opportunity to reconstruct Plato's position from the beginning and they gradually found the definition meaningful. But the idea of each man having a function, not only within society, but as a human being, was very difficult to get across. We discussed briefly the Christian notion of man's function on earth and read Cleaver's "On Becoming". In the latter we concentrated on his belief that there are some things a man can do that make him less human and the process by which Cleaver arrived at that conclusion. The students found the essay very difficult but it made Plato's position more meaningful, if not much easier to comprehend.

V. In the epistemology section we concentrated on the Divided Line and the Allegory of the Cave.

a. Divided Line

I gave the students a diagram much like Cornford's with two additional categories: that for A, B, C, literal language suffices, but that for D only mythic language can express what the philosopher knows. We also used an example that Wayne found somewhere taking the way in which four men might know a car: an ordinary man, a mechanic, a physicist and a philosopher.

We reviewed the Tillich article and used his concepts of symbol to describe mythic language and of utlimate concern to describe what the ultimate concern to describe what the philosopher knows. To explain the dialectic and the difference between the knowledge of the mathematician and that of the philosopher, we returned to the Cleaver essay, "On Becoming" and discussed the process he went through before arriving at his statement of ultimate concern as one of stripping away all the assumptions and beliefs he had formerly held, thus discovering the principles upon which he would base his concepts of right and wrong.

This sequence worked extremely well.

b. The Allegory of the Cave

The discussions centered upon the problems of why the man returned to the cave and why he got killed.

VI. The Dissolution of the State

Plato's notion of democracy produced a lively debate. The question "why did Plato build the whole thing up just to tear it down?" seems to have disappeared. We are just completing this section and will read only as far as the comparison of the just and unjust man.

For the remaining three weeks we will read The Communist Manifesto concentrating on the second section and then probably deal with an article by M. L. King, "Non-violent Resistance to Evil", Malcolm's "Ballots or Bullets" and possible part of a Carmichael speech concerning the use of violence. My main reason for doing the Manifesto is to get it into their hands. Almost all of their present knowledge of communism is derived from a propagandistic high school requirement, "Democracy vs. Communism" and they will have to take another such course in order to graduate. Obviously it has relevance to The Republic. The intention with the other material is to examine the positions of violence and non-violence. The crux of the discussion might center around the question: is there any point in being a just man in an unjust society?

Two aspects of doing Plato may have been harmful. A few of the best students became exasperated with the arguments of those surrounding Socrates, but the majority of the students read them uncritically. I did not want to spend time picking out fallacious arguments because I think this destroys the whole sense of the dialogue. The bad effect this had is that it tended to reinforce what were already sloppy reading habits. For careful textual analysis much of Plato is too difficult. But his kind of close reading is what the students need to do. On the whole, however, I think the semester was a success.

Philosophy for Architects

We were approached about midway through the fall term by the architecture department and asked to devise a course that would help their students think "more clearly and creatively". It was never very clear just what we were being asked for so we finally decided to offer them a more advanced version of the first semester of the Program course. The emphasis there is on epistemology, a rather technical area of philosophy, and we rashly assumed that the architecture students would be able to handle it. They were to be mostly third, fourth and fifth year students and had taken elementary physics, calculus and some engineering. Things did not turn out quite as we had expected.

We found that in the Program course the greatest difficulty was in overcoming an initial skepticism to something as "far out" as philosophy. And if this was true for Program students, who had been exposed to a lot of strange things in their freshman year, it would likely be even more true of non-program students. We decided, therefore, to begin the semester with a concerete problem which would be related to their interests, and which they may have already encountered. After some discussion with the architecture faculty, where it was revealed that an environmental planning curriculum was in the works, we settled on the notion of function as an initial problem. They had presumably discussed such topics as the relation of form to function, the function of a limited environment within a larger environment, etc. Presumably we would have little trouble demonstrating to them that their understanding of the concept was superficial, (we were told this by their instructors), and this would allow us to move into our regular course. We expected to move much more rapidly through the course and end the semester with a reexamination of the notion of function from their newly acquired, hopefully more sophisticated, perspective.

We assumed that because they had had a fair amount of science they would consider "natural functions" as a relic of the past and that their endorsement of the mechanical viewpoint would be wholehearted. Our strategy was to undermine this view by exposing assumptions which we felt they would reject, and show them the possibility of an alternative. During the second class period it became apparent that their science courses had had little effect. When we mentioned the possiblity that natural objects did not have natural functions they laughed. As we pressed them the laughter turned into contempt for our intellectual abilities, some doubted our seriousness, or our sanity. This reaction was so unexpected and so startling that it took us several weeks to recover.

Our first instinct was to drop the subject and substitute another topic for purposes of an introduction, but the students had become facinated with our "weird" point of view and wanted to hear more about it. They simply refused to believe that anyone, especially scientists, could believe that natural objects did not have natural functions. The discussion soon turned to biological sub-systems such as the respiratory and circulatory systems, in which they felt any fool could see design, purpose and function. We countered with the theory of evolution, but they knew nothing of this theory and again refused to believe that anyone could seriously maintain such a position. We therefore produced a bona-fide scientist, in the form of Robert Cobbins, the Program biologists, who gave them a rousing lecture on the differences between vitalism and mechanism and the difficulties inherrent in the former. They were duly impressed but remained unconvinced.

The discussion continued for the first four weeks of the semester, during which time we covered most of the main problems encountered in a defense of teleology, all to no avail. By this time we had completely lost the possiblity of pursuing the course as planned, so we abandoned the plan altogether. Several other surprises contributed to this decision, primary among them was the students low tolerance for anything which they could not use in an immediate and concrete way. What they wanted were formulas for creative thinking, formulas which would provide shortcuts in the analysis of architectural problems. When they realized that we were not offering shortcuts, that in fact we were asking them to do more thinking rather than less, they decided that philosophy was not for them. There was one period of two weeks or so when attendence dropped to about one third of the official enrollment.

During the sixth week we finally regained some sense of direction with a discussion of the categories which we apply to natural objects as opposed to those applied to architectural objects. This interested most of them, class attendence picked up, and we did some very good work for the remainder of the semester.

The experience has been most interesting and we think we have learned something about the problems of "implementing" the philosophy course. We intend to redesign the course this summer and a full assessment of this first effort will have to wait until then.

STUDENTS ON THE PROGRAM

Vodray A. Mills,
Counselor
Voorhees College

The following reports were comprised by a "Task Force" of junior students who formerly were Thirteen-College students.

The report was done purely from an objective stand-point-of view, after explanation for such a report was given to the students.

G.S. - Junior, Majoring in Biology

While in the project the first two years I felt free in the manner and method I could express myself freely in classes. I could debate with the instructors without the fear of being flunked in any courses because I disagreed. However, several instructors had certain ways which were annoying at times but I soon became adjusted to their methods of teaching these subjects.

The contrast between the 13-College Project and regular colleges program is quite wide in that one cannot freely express his opinions in the regular college. In my opinion, there is too much lecturing or answer-questions situation but little or hardly any student participation. I find that most of the instructors in the regular college program only seem to take up their time with the brighter students while the slower students are given hardly any attention. This causes the slower student to lose faith in himself or to struggle on their own.

In the Project, we were given many books to read, with a great deal of assignments in reading reports. I feel this helped me in learning to read good books and a variety of books on many subjects which pertain to the world we live in today with its many problems which many authors suggested ways and methods to created a change.

The project had unusual ways of making us think and this was rather unique to me. I can never forget this part of the project. I quickly gained the ability to think for myself after being exposed to the project.

In the areas of dis-advantages, after being in the project. I felt with the background received from the project curriculum it would make me really challenge the regular college program. But, we soon found this difficult when majority of the time, our ideas could not be expressed quite freely. The program made the (100 members student) feel like one, although we were sometimes sadden by certain occurrence such as the U.S. Army drafting members from this large family, and others who had to leave for personal reasons.

There are many advantages, I feel, in being a part of this project. Many of the students in the project held many offices in the numerous organizations on campus.

Those of us in the project in 1967 and 1969 took part in one significant project in the community, at Christmas we collected and repaired toys for the less fortunate children in Denmark, South Carolina. We requested and accepted the help of the regular college student who participated.

The financial benefits were very helpful to us, it help us to buy personal items that we need and sometime it was used for paying transportation fees to our homes and back. These benefits really took a burden off our parents, since most of our parents could not afford to give us allowance.

I enjoyed my trip to Washington, D.C. in the spring of 1968. I think there should have been more plays and ballets, but more important, we the 13-College students should have had a voice in the choice of enrichment programs. Our suggestions should have been considered.

J.A.B. - Junior, Majoring in History

At this point I have had a few courses within the regular college. In the regular college program I found that some of the instructors, after finding out that you are a student of the 13-College, becomes defensive in many cases which I have personally experienced.

Financially, the 13-College Project has provided for me an opportunity to enter college. Without it, I never would have been exposed to higher learning. By being in the 13-College Project, I was introduced to a wide varity of educational materials and exposed to a new and exciting method of teaching, but most of all, it allows freedom of expression.

The disadvantages of the program include the contrast between the 13-College Program and regular college sometimes cause problems such as lacking of courses in major areas of study.

I have always thought that this was an accelerated program. Therefore the course in philosophy should be related to other course in the regular college program so it will benefit individuals.

Some improvements recommended would be that the Project offer French in the freshman year. In most colleges this is taken at the freshman level.

L.W. - Junior, Majoring in Biology

I am at present a senior at Vorhees College, one of the Fourteen Colleges affiliated with the Thirteen College Curriculum Program. Being a senior with two years in the Thirteen College Program and one year in the regular college program, I feel that I'm in a good position to give both positive and negative criticisims of the Thirteen College Program.

The Program has been beneficial to me in my two years for many reasons, one of which is centered around financial aid. Being in the Program allotted the financial aid necessary for me to attend college. Without this aid, I could truthfully say that my college career would never have been started. I think that the idea of giving students a stipend was also a good one. This money was used by most of the students to improve their personal hygiene. I was disappointed when this aspect of the Program was omitted, although I am no longer in the Program, I am quite certain that a stipend would be as beneficial to the remaining students as it was for me.

I started College with hidden fears, due to stories I had heard about routine classroom procedures of an Instructor walking into a room giving the daily lecture and leaving without allowing or leaving room for question and answer periods. Being in the Thirteen College Program shattered all of those hidden fears. This Program, in most cases allowed me to talk freely in class without fear of the subject, instructor or fellow students. This was probably due to the casual atmosphere created by some of the Program Instructors during their class periods.

While in the Thirteen College Program, we were given an abundance of reading materials. At the time I didn't like the idea of that much reading, but proved to be quite informing and eventually enjoying. Now that I am accustomed to reading, having four or five chapters to read in several classes doesn't seem like an impossible task.

A disadvantage in the Program is the course in Philosophy. Although I liked the course, I felt that it is an unnecessary course. I can only use these hours as elective that I don't really need or want. Therefore, I believe that instead of Philosophy, there should be a History course, because every College student will need some type of History course before they can graduate.

The Thirteen College students at our school went on a trip to Washington, D.C., in my freshman year. Although it was the only one we had, it was very rewarding. Believe it or not this trip carried many of the students for the first time out of their native state. While in Washington, we saw those things that we have been learning about and reading about for years, such as the White House, The Capital of the United States, to name a few. For some, this was a dream come true. I think that more trips of this nature can be a very rewarding to a student. Helping a student to see the country, he has read so much about is in some ways just as important as helping him to understand a math problem.

I really don't know if the program should be extended beyond the deadline date. When I look at the students in the Program now, quite a few of them seem as if they have lost interest in the Program and even interest in the college as a whole. I may be wrong and I'm also hoping that this isn't true, but as far as my personal experiences, I feel that the Program should be continued beyond 1971. It has helped me become a better student and I feel that if it helped me, it has and can help others.

B.O. - Junior, Majoring in Business

I think that in the 13-College Program, the learning experience was much more exciting, colorful, simple, (easy for students to be able to comprehend subject matter) and much more meaningful.

In the Regular-College Program, a good deal of the time class seem to be very dull and not very meaningful; I think this comes from having too much theory and not enough actual learning experience, in other words, we don't do enough of what we are being taught about, we don't have enough equipment to get really involved in what we are talking about, we don't have enough visual aids to really see what we are talking about, nor do we get to travel enough to the places where we might get an actual learning experience of what we are studying in class.

I think that the 13-College Program could be improved by getting more equipment, tools, and learning aids. I also think it would be helpful to have more educational trips, lectures, and learning activities; I think these kind of things help inspire students and make them want to learn more. It also would be helpful to get more people just to work with students personal problems; I think that a great deal of the students that have personal problems, this keep them from learning at their best and it keep them from being at their best in whatever they do.

J.B. - Junior, Majoring in History

Contrast Project with Regular College

Project -Allows individuality
- -Instructor is there to guide, not to indoctrinate
- -Learning pace is based upon one s own ability to comprehend.
- -Self-expression is encouraged, (no fear of a back lash from instructor when a student expresses his view which may be contrary to that of the instructor's.
- -Communication between student and instructor is open.

Regular College

- -Instructor lectures for the entire hour, no chance to ask questions. (Sure the student can come after class, but then there will be only one student to benefit from the question instead of the entire class.)
- -Relationship between student and instructor is more or less restricted, in what, the student fears saying something that would cause the instructor displeasure, thus reflecting in the student's grade.
- -Evaluation is based upon the amount of knowledge a student has gained from the instructor's lectures and how well he is able to memorize it when examination times comes.
- -There is no chance for open expression, where as, the students may have the chance to learn from each other, the things that are not being taught in class, but are just as beneficial.

What Have I Gained in the Program?

I have gained - (1) The iniative to seek information outside of the classroom, that is relative to the course, without it being required of me.

(2) Confidence in myself as a person. I am no longer apprehensive about speaking out for fear I am wrong, or that

what I am saying is too simple. The Project has given me the outlook that nothing is ever too simple, because there is always someone else in the same class that is thinking on the same level as yourself.

(3) Courage to face the obstacles that I can't overcome with just one try.

Advantages of Project

(1) The Project offers a wide scope of ideas not necessarily confined to one main course. That is, under one course heading there are varied topics for discussion which do not have to directly relate to a course. This gives the student a chance to be flexible and creative in his thoughts and ideas.

(2) The Project touches upon the more difficult or advanced courses in certain fields. This familiarizes the student with subject matter he will be faced with, maybe in his Junior or Senior year in college. It also gives the student confidence in himself by having been exposed to the subject matter.

Disadvantages of the Project

(1) The switch-over from the Project to the Regular college proves to be difficult for those students who are specializing in areas which the Project doesn't prove a good foundation. For example, Business Administration. Some Business students find themselves attending college one semester or one summer session longer because, when they get out of the Project, they have to start with their Freshman courses in his field to build a foundation.

(2) Some of the course headings do not correspond with the subject matter. This, also makes it hard to switch-over from the project to the Regular College. Some courses aren't explicit in their difficulty with the Registrar and other officials in determining what course in the Regular college program the student will be given credit for taking. There has to be an equivalent course in the Regular College Program, so as the course in the Project will balance with it.

Improvements and Recommendations

(1) Have courses in Project more clearly defined.

(2) Add another course to encompass other majoring fields. Whereas the student, no matter what his major, will get the necessary foundations.

(3) Or, in the Freshman year of the Project, allow the student to take at least one course in his major field per semester.

General Impression

The Project in its general scope provides in a long run, a very rewarding experience and accomplishment for the student who has obtained the knowledge it provides.

It is a program whereas the student is it's greatest achiever. This is the way it should be with any course, but unfortunately it isn't.

If this Project proves to be a success in as far as producing a change in the method of instruction and course outline, it will be a welcomed Revolution, at least on the part of the student.

VISIT TO A COLLEGE

Paul Freundlich
Film Maker
Consultant to ISE

[This is a slightly shortened version of the original report. Fictitious names have been substituted for the real names of the teachers, students, class sections, and the college. Editor.]

What I'm attempting is an impressionistic report on my visit to Central City College, following whatever lines of speculation seem to derive from a basically choronological account.

A few weeks before I arrived at Central City--doing some research for another project entirely--I visited a high school in West Palm Beach, Florida, where a young black artist was in residence. Her work and working patterns were supposed to influence the kids in the school, and they were, though only a few. I was standing around watching her work at one end of the room and several kids working individually elsewhere in the room on their own projects, when I finally wandered over to one of the students and asked him the right question.

Which was: "What else is there in your life that makes you feel like this?" His answer as he continued molding the head he was sculpting was that sometimes in track, when he knew he was running particularly well and in one science class, when he would get deeply involved in an experiment--but otherwise there were no moments when he felt the same freedom, the same level of creativity.

There are very few questions worth asking, and few of them have a chance of being either formulated or answered unless you are deep into the dynamics of situations, the character of the participants.

Edward Brown's class at Central City College--Section A, one of the four sections of 25 students each. Equations, texbooks, Brown helping a student through a problem at the blackboard. A little slow at eight o'clock in the morning. Sort of a formal looking class - what does all this have to do with ISE, games, concepts, breakthrough?

Which shows how hung up you can get on certain matters. What else I begin to notice after a while is that the kids really seem interested. But I don't see why.

After class, Brown asks me what I thought. I tell him I'm not sure, except that the kids were involved in what was going on. Obviously, some of the clues I'd picked up weren't what they seemed. In any case, I'm not competent to judge the mathematics involved...and a few other such evasions I occasionally resort to when not sure of my ground on somebody else's turf.

But Brown wants more than that, so I tell him about the textbooks and the formality of what I perceived. Well, the textbooks aren't textbooks, just one of several reference works; they'd done games when the games seemed useful, and why didn't I look at his other section?

I say I'll do that, also come back to this one. Very dissatified with myself.

Off to a class in science. I last about ten minutes before Beatrice Rogers sends an emissary to drag me off to a dramatic reading of Old Prophet Nat by her nine o'clock class. I'm so amazed at the whole performance that I sit through her next class as well. And I even learn something: Beatrice knows enough of the kids personally--knows their families--that something very nice begins to happen. She reaches outside the class into their lives for the material to maintain their interest, to clarify their thinking. That she does it in a highly authoritarian manner, and that she doesn't get down to what seems to me the true intellectual issues being raised, begins to seem almost irrelevent. Something's happening: She's doing the best she can. Leave her alone and let her do it. Which after thanking her, I do.

Joan Greene has Section B. A very nice lady - schoolgirlish and sincere. The class just took a bus trip to a nearby city: They gas about it for most of the period. The discussion never goes anywhere - sounds mostly like "what I did last summer."

And that was it for classes. Except I hung around the office, hoping for some insightful activity, some inspiration after a fairly dull and depressing day. A few students drop by, some informal probing, and an hour later I'm still talking with one Robert Lloyd Johnson - on the grass outside the building. Robert...Bob...likes the program, but is ready to leave Central City College--doesn't like the administration, doesn't think he can get the advanced math he needs - Oh yes, he has Brown for math, who has been encouraging him to go elsewhere for engineering.

Lots more with Bob. But the real payoff is the next morning at eleven. Scene - a few easy greetings exchanged with Brown, Bob, Joe Spottswood (another student I'd talked to) and my presence is accepted.

Okay, so I've seen this group playing games with Joan Greene and moving things slowly with another class. What happens here?

Plenty.

Introducing Mr. Brown, concert master, choreographer, master teacher. Watching the class was one of the more interesting intellectual experiences I've had in the last few years. There were so many different things going on at one moment that it was hard to decide what to look at, concentrate on. And all of them pointed in the same direction -- the mathematical development of the class. What made it so complex was that the component elements of the class kept shifting, in what was at first a highly unpredictable manner. For me, not for Brown.

Oh, and Bob Johnson was the deputy, the assistant. Early in the year, Brown had let Bob function as one of two tutors, the other being a sophomore. Because B section stayed together moving from class to class, that function of Bob's in the one class, became part of the group dynamic in all classes. But more of that later.

Let's look at this class of Brown's.

Twenty-one students. One at the board at the end of the room, about six in chairs facing him while he works through a problem. Brown there, mostly watching, occasionally raising a question, and guiding its solution through the group.

Bob in the center of the room with about five others, desks pulled around in a circle working on another problem. Three or four working at other boards on individual problems. The rest, essentially out of the stream, working at their desks privately. Quite a bit of talking being done, but not loud enough to interfere.

One girl jumps up from Bob's group. She disagrees with something, walks over to a bookcase in the far corner, shuffles through several books, finds what she wants and stands there reading it. The group settles down after a minute, temporarily out of gas. Another girl joins the first at the bookcase, someone else wanders off to look out the window. Bob watches what else is happening. The first girl finds what she wants. They drift back together and in a minute, with new ammunition, they're off again.

Brown moves on to another problem. This is at the other end of the room and several of the students who had been with it, stay with it. Brown may feel that his presence is no longer productive, but they haven't worked it out to their satisfaction.

On the new problem, one of the boys who had been working at his desk moves to the board to explain his procedures. This is tougher material, and different students are involved.

The groups shift, the individuals move in and out. Words, symbols, chalk, pencil, exchange.

By the time I pick them up again, it's Thursday morning, and their next math class. I'm following several lines of investigation, one of which bears on section B, so I'll go into it now.

Joan Greene has invited me to a Friday morning session where her two sections (A & B) will meet with the school librarian who is an expert on Nat Turner. Her students, as well as Beatrice Rogers, have been working with the novel "Old Prophet Nat" and there has been reading of the ten black novelists' answer to William Styron as well as a few students reading "Confessions of Nat Turner." The librarian has already addressed the students, now he will meet to take questions.

Since what I'm after on this visit is the normal flow of events--what's usually happening--I'd ordinarily duck such an invitation, but having read the book myself by now (Tuesday night) and Joan is such a nice lady that I accept. Which suddenly looks very good when I realize that section B is involved, because now I'll have the opportunity to observe the interaction of two groups and see how that modifies the patterns I've noted.

To set myself up properly for the Friday session, I sit in Thursday morning on the Section A preparation, in their regular class with Miss Greene. She sits on the desk in the front, the students in more or less formal fashion in rows facing her. But the mood remains relaxed--as relaxed as when with B they were reviewing the trip to the nearby city. This time, however, the focus is very definite. There's no point duplicating questions. "There's no sense not being very clear about your intentions when you ask a question, or about your language." Good stuff. The kids are intellectually and emotionally involved with Nat Turner--find out where they want to go with their curiosity, then lead them to assume responsibility for their thinking and its expression. Like it's called "Ideas and their Expression" and is.

This is the same group which had the first 8 o'clock with Brown, and they're still not scintillating, but it's a good class, and I feel ready for the Friday session - that I'm aware of the sort of continuity that has been going on in Joan Greene's classes to lead to that moment.

Now, back to Brown's eleven o'clock math class. I've attended for comparative purposes, at eleven the first twenty minutes of a regular program Western Civ class in another building. I almost went out of my mind. The intellectual pretension of the lecturer was almost as overwhelming as the physical claustrophobia. About 40 students strung out in a lecture hall. This man occasionally glancing up from his notes to read the effect of a particularly telling phrase. The subject was European expansion in the fifteenth and sixteen centuries, which turned out to be a sort of wide ranging apologia for colonialism. Students either scribbled madly or played boy-girl games in the back rows (I don't mean anything overt.) The lecture was all for show. There was nothing for the class to do but learn the lecture by heart and repeat it back come exam time. An intellectually insulting exercise. I'm on my way to another Western Civ class and rush past Brown's door at about 11:25, stick my head in and stop.

Because not only is there total silence in the room, but complete concentration--the whole of the class directing itself intently toward the one student working out a problem at the blackboard. Brown stands off to the side, just as intent. The tension is amazing. Now remember, this is the same B group I described the previous day doing a half-dozen different things, moving, swirling.

I slide into the room and no one even looks at me. The student at the board isn't even writing any more--just looking at the symbols. After several minutes I pad over to stand beside Brown, and still no one including Brown takes any notice of me.

"They're really into it. . ." I whisper to him.

"Yeah, it's tough."

I back off about a yard and take in the whole class. The urgency of it. And Brown. Obviously the man could cut through the problem in a minute--instead he's struggling with them all the way--suffering along with their struggle in the understanding that's where the educational experience is.

Bob asks a question. Someone else drops a comment. The student at the board painstakingly scrawls a few symbols. A head nods here and there. More comments. Brown points something out. The problem works through to an answer. More checking among the class to make sure they've got the process down. About half of them are there. Most of the tension is gone-sort of a collective deep breath, and then things begin to move again. Tentative at first. A few students move off together around another problem--taking off from the implications of this one--another group back to what was worrying them before this urgent situation required their attention--the rest still staring at the board thinking about the awful symmetry of it all (I guess).

And fifteen minutes after I walked in, I walked out, things back to normal--surging, shifting, moving.

Section B. Dodds for physics. Bob had told me in our long conversation that the physics teacher was over their heads a good deal of the time, but they were hanging in there as a class.

Chatting with Dodds before class, I get somewhat the same impression--that he likes the class, but that in the month and a half he's had them, it hasn't been easy going. I begin to get a sense that before a class can happen--before teacher-student, student-teacher, student-student can happen, a basic context has to be established--and that part of that context is a common base of understanding about how the world is put together-partly informational, partly conceptual.

Maybe that sounds pretty obvious--like it's the basis for most of the education which goes on today: learn the names, dates, jargon, terminology, formulas, then you can begin thinking within the discipline. . . maybe.

In my own thinking and in the program we've been working the other way--the student's curiosity motivates him to master whatever out of a total body of disciplinary material he finds useful in completing that intellectual search. So I'm beginning to think that's all very cool on an individual, or tutorial approach to education. But if you have a class, and mean to take advantage of all these kids together, they better have something going together--that common context, those shared concepts. YOU NEED A TAKE-OFF POINT, TO TAKE OFF.

One more aside. What I've heard even in the program, reinforcing my own observations, is that class size is one of the things you've got to contend with. In other words, the ideal situation is one teacher and one student, and things go downhill from there. Maybe that's extreme, but I haven't heard anyone arguing that over eight or ten, anything is to be gained.

Which sounded impressive to me, but during this week and the next I began to realize, that up front, you don't try the same thing. Second, that in the hands of a sophisticated teacher, the size of the class can work positively-in terms of diversity, variety, challenge. I'll pick up on this when we come to Joan Greene's two classes together, numbering about 45.

Dodds, like all but the most up-tight teachers, doesn't promise me much of a show. He's not even sure how the class will work out today - they've been working toward a series of student presentations taking off from physical problems.

Dodds begins talking about the due date as next week. Any problems? No? Okay, well you might as well break up into groups.

Which takes care of the formal part of the class.

About half the class goes off into a small room off the lab, and the rest forms a group around - guess who? Bob Johnson. I try the group in the other room first.

The dominant force here is a tall, quite lovely girl, Judy Caldwell. Everybody seems to know what they're doing-what part they're taking in the presentation, what's left to run down and get together. A few kids are grumbling about the amount of work, but not seriously.

Joe Spottswood walks in, one of the more aggressive boys. Evidently he belongs to this group , but had been talking with Bob. He immediately moves in on the decision making process, but Judy with the support of the others puts him down quickly. Like, "we just went over all that."

I move out to the other group, which Bob is running with the efficiency of a good platoon sergeant. The question of the moment is "at what point are all the separate elements complete so we can do a complete run-through of the presentation--make sure everyone knows his part - should someone act as critic to bring up weaknesses that Dodds will probably spot?" Much dither about ideal meeting times for the several subgroups.

About this time Dodds who has left the room entirely wanders back in, looks around approvingly, then walks over to Bob's group. He listens for awhile, then begins throwing in some fast questions about what they're planning to do. The challenge is tough, almost arrogant. "You better know what the hell you're doing" - and that isn't a direct quote. "Yeah, okay, we'll be ready." Just as aggressively, but that's not a direct quote either. Very tough, good humored on both sides. "I'm giving you the freedom to blow it - don't blow it." "Right on - and we won't."

A few minutes later the group breaks up and that's class for the day for them. The other group is still in there when I leave.

Dodds was challenging them to think scientifically, after they'd been getting by with not thinking at all. Moreover, Dodds is, I think, recently out of his own graduate work and somewhat out of touch with their level of sophistication. He wanted them to get into physics in a way that was believable to him as physics. Which made it tough for al concerned--and they were still, as a group--Dodds and the class--worrying about that when I came on the scene.

My perception is that they were beyond those problems and flying, but it had been such a long, tough takeoff, they didn't believe their wheels were off the ground. (Well, at least the metaphor is physical.)

Next morning, eight o'clock. Since Joan Greene is going to combine her two classes (A&B) at eleven o'clock, Brown uses his regular 8'oclock slot for a joint meeting. Outside.

The first time I talked to Bob, he complained that even in the program, course material tended to get abstract--that they had kicked around in math the possibility of tying in trig with the surveying going on all over the new Central City campus.

So that's what Brown has in mind for the two sections. They're off to the construction site of a new building. The problem: figure out some legitimate mathematical questions and then use what you know to answer them. The guy is really out of sight.

On the construction site. About thirty students and Brown in a parking lot overlooking the site. Bob arguing with five or six; Judy Caldwell doing some heavy coordinating--noting questions and bringing them back to Brown for his insight; the majority standing around looking at a construction site on a warm spring morning--but perhaps looking at it a little differently, more creatively than ever before.

A group of seven or eight has been deputized to interview the construction crew--which has mostly given up in the face of the academic assault.

About ten of nine, the class is dismissed, with one girl busy on the site establishing a doubtless lasting friendship with a young worker, and Joe Spottswood still talking to the foreman. Turns out his father is a construction worker, and this is familiar ground for Joe.

Next week they are expected to present the problems they've formulated and their solutions to the class. Sorry I missed it.

At nine I ride over with Bob to Bill Collins' apartment. Bill uses Fridays for small group sessions--seven kids sipping cokes, trying to make sense of the unit Bill has devised about Vietnam.

The first half of the year they worked on slavery. Not only North American variety, but South American as well. Now Bill, compelled by the urgency of Vietnam, is in real trouble with material which is way over the kids' heads.

Basically, he's doing in his own way, for all the best reasons, what traditional teachers have been doing for years--saying "this material is so important you've got to know it--so important that it takes precedence over the process of education."

His rationale is that these kids or those around them will have to face the reality of Vietnam, so they better be as sophisticated as possible about it. A laudable ambition-the problem is that as yet they don't really understand how social institutions work in their own country. That's not to opt for cultural isolationism. Probably any microcosm will do, and there are advantages to working with foreign material - you're not so emotionally involved, so you have more perspective on it. But Bill wants them to understand the whole thing - I mean the French involvement, the history of American involvement, the cultural context, the Chinese input, Russian, domestic Vietnamese politics - all the stuff our State Department can't seem to figure out.

The kids can't keep the names straight and feel thay have to. Bill Collins also has a series of moral imperatives which he's pushing pretty hard. I agree with most of what he's saying, but question his right to push anything. Anyway, the group isn't buying much of it. The question of atrocities - of prejudice toward those Vietnamese - is very confused in the students' minds. To a great extent they identify with that American soldier over there (presumably black). Bob has a friend who was over and he strongly defends him -and as irrelevant the moral question of American involvement-exploitation. I don't mean it like that - more, "I mean you're there and you've got to survive."

I throw in a few analogies to institutional situations with which they're familiar and some pretty good stuff gets started. Bill and I sit around arguing for a half hour afterwards about what are the legitimate areas of investigation in a class. I go alot further myself than I think I have any right to - after all it's Bill's business to work out the continuity of his own personality and that relationship to the continuity of the class. I only procede because talking this out seems important to my investigation- and I make it very clear that the thoughts I'm expressing are on Bill's sufferance. "This is your class, your business - if I'm intruding, shut me off."

He doesn't at any point - very open to criticism, terribly honest about his own limitations, sincere and dedicated. I admire him.

At eleven, Joan Greene's two groups to meet the librarian about the Real Nat Turner (please stand up). The librarian can't make it at the last minute, and Joan not at all fazed, sets up on the spot two small panels to debate character of Turner. In about five minutes the mechanics are worked out and the kids go at it.

I wondered what would happen when the two groups came together - it was really beautiful - about forty-five students functioning almost completely on their own and really coming to grips with some tough stuff.

Of all the things that came out of that very rich hour, the happiest for me was one of the students using an analogy about South American slavery, pulled out of the first semester of Bill Collins' class, to clarify a point. There was sort of a pause, then everyone nodded, the context understood and accepted and they moved on to something else. That evening, over drinks at the house of another member of the faculty, I was able to pass on the connection to Bill, and his happiness was enough to clear up any loose emotional ends from our earlier discussion.

Another story about this class takes longer to tell.

There was this sort of square looking student, always carrying a briefcase, wearing either a floppy sweatshirt or a suit and tie. To my shame, I don't remember his name.

I've never heard him speak in any of the classes I've attended, until he stands up midway in Joan Greene's Nat Turner seminar. And says a few mild things like - "You black men know you're all lusting after white women, so what's so strange about Nat Turner (as interpreted in "Confessions of..")?

As you can imagine, there was considerable uproar. Bob took him on, among others, and didn't get very far. This guy is very sharp - turns out to be a minister - but in this case playing devil's advocate, and very intelligently. What he has done is cut through all the rhetoric to the realities of their own nature. Not that they're lusting _only_ after white girls, but the "black is beautiful" thing is so strong, that it makes it almost impossible to admit white-oriented desires (and when you consider the exposure to white advertising and images, it's got to have had some effect.) By the time as a group they get past his criticisms, they are also past putting down the Styron version because they don't _like_ what it says.

This seems remarkable stuff within a class (teachers obviously do some variety of it all the time). The initial response from the other students was almost one of betrayal. "How can you be _saying_ those things?" Because the Nat Turner thing was cutting into a lot of heavy image building, and had to be put down. _I_ don't mean to put down the image building - you can also call it "definition of identity" and it sounds more respectable. Any group does it and you're certainly going to have plenty in a group of young blacks going through a cultural revolution.

The point is that in a program which gets down to the gut issues of life, a class is bound to get into some difficult psychological areas. No teacher wants to insult the dearly held ideas of his students - often he feels insulated from their relevance by age or race or sex. But the avoidance of issues - or their consideration with anything less than maximum intellectual and emotional honesty is the pre-condition for the most destructive kind of irrelevance.

It's bad if large areas of a student's life are separated from systematic analysis: it's worse if those areas are considered, but in a way which convinces the student that he must reject the implications of his thought and emotions. The first convinces him that school is a game; the second, that life is a game.

Anyway, after some rough argument, the class works it out, and the first thing that happens after the class is over is that Bob rushes over to this man, grinning and pumps his hand enthusiastically. Not the "no hard feelings" bit, but real appreciation for pushing the class (and himself) to a tougher line of inquiry.

Here's another one for Bob. The initial student response to Pranger's

"Old Prophet Nat" was very positive. Nat is a hero, almost perfect. Now Bob is saying that's a bad thing. He pinpoints several experiences in Nat's childhood and youth which don't have any relation to his own experience (Nat's call at an early age, his certainty of purpose). What I get out of this is something which conforms to my own thinking - that setting up heroes, where you don't see the human, emotional crisis which got them to the point of heroism, sainthood or whatever is very dangerous. In effect, youth, knowing its own emotional reality, gives up on any possibility of heroic, altruistic, idealistic behavior. It knows it could never do those things, and concludes that what the hero/saint has done is either a lie or the description of a different order of humanity. Youth feels cut off from idealistic behavior because of base emotion, when the real divider is the human experience which the hero/saint has gone through (unexplained) and that youth has yet to face (unexplained). Whether youth gets to that point is irrelevant. What matters is that it conceives the possibility.

Whew. For all of that - that's not exactly what Bob has on his mind; a much tougher and more specific indictment, which I get from him after class. Pranger, he feels, with his use of first person, explicitly autobiographical narrative, sets up Nat as aphony. The contradictions between what he tells you and what you believe out of your own experience become increasingly difficult to handle as the book goes on. The final result is that Pranger destroys Nat as a believable revolutionary as thoroughly as Styron.

I've hardly mentioned Joan Greene in this, but she was there, mostly being happy at how well they were all doing. She couldn't have controlled those 45 students. She didn't have to. That class ran the way it did because over a period of months, the tough business of individual and group assumption of responsibility had been accomplished.

John Wilson is in his first year teaching, his first year teaching philosophy at a Southern black college - and very revved up about it all. I'd looked forward to seeing him teach. He has a first-rate intelligence, great energy and no discernable hang-ups. Plus impeccable credentials. Very imaginative - we'd had a few good talks over the previous summer. But how was all that to be translated into Philosophy?

What John and his two Sophomore classes are busy doing is recreating society. The basic text is Plato, but the problem is given a number of individual functions (farmer, soldier, various craftsmen, etc). What are the necessities of power that govern the development of the state? Out of their own experience, the students are challenged to accept the implications of their political, social and economic thinking. If the farmer wants to hoard food to attain political control, who can stop him? Is the military consistent with a democratic society? What are the advantages of a tyranny to those who lack ultimate economic power?

John was saying "if you say this and this, what does that mean? Forget about the rest for a moment." I think you have to say that if what you are after is *process*; if what you are after is the creation of philosophers, rather than a philosophy. That's the essence of it. Of course, John has a vision of how the world is put together. Were he a researcher, involved in pure speculation, his primary role in the classroom would be to create the most sophisticated and useful philosophy for those students. As a teacher of philosophy, his primary role is to create with those students a personal pattern of philosophical speculation.

In closing let me say something about my impressions of the value of the summer conference.

My suspicion is that with less formed teachers (or more open) that exposure to the summer conference is critical. That the reality of the department and the pressures of a regular classroom are so demanding that a teacher needs to be pulled out of that normal environment to take a fresh look at things. That about the most you can expect, is that you support the teacher's inclination to open things up in the classroom (as traditional education has supported any inclination to behave in an authoritarian manner). If I'm right, curriculum materials, no matter how good, will never do the job, only help.

Or, in the words of Carolyn Fitchett, "The point is - what's a program without the good teacher? You can have all the good materials you want, and you can create this fine curriculum - we think it's good - but without these teachers who are whole people - who have this sense of creativity and spontaneity, the program goes down the drain."